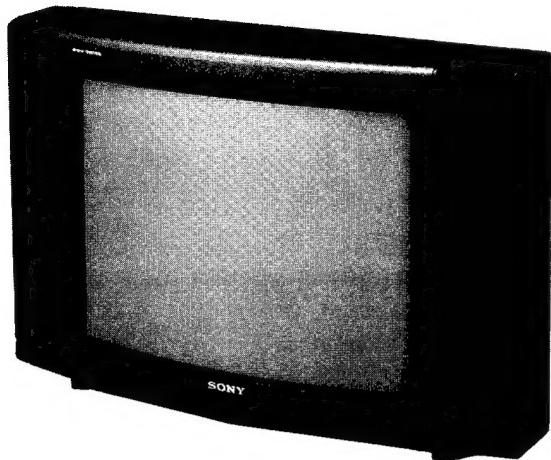


KV-C2721D
BM-670/673

SERVICE MANUAL

*AEP Model
Australian Model*

Chassis No. SCC-B14X-A



AE-1 CHASSIS

Note: The service manual for RM-670 and RM-673 has been issued separately.

MODELS OF THE SAME SERIES

KV-C2721D (AEP, AUS)	KV-X2521D
KV-C2911D (AEP)	KV-C25TD (AEP, AUS)
KV-X2121D (AEP)	KV-C27TD (AEP, AUS)

SPECIFICATIONS

Television system	CCIR B, G and H
Color system	PAL SECAM/NTSC (VIDEO IN)
Stereo system	German two carrier system
Channel coverage	VHF channels E2-E12 UHF channels E21-E69 HYPER BAND S21-S41
Picture tube	Trinitron tube 114° degree deflection Approx. 68cm (27 inches) (Approx. 64cm picture measured diagonally)
Sound output	10W+10W (music power)
Inputs	21-pin connector : CENELEC standard
Outputs	Headphones jack : stereo minijack External speaker terminals : 2-pin DIN
Power consumption	115Wh
Dimensions	Approx. 810×530×480mm (w/h/d)
Weight	Approx. 43kg
Supplied accessories	RM-670 Remote Commander (1) (FOR PORTUGUESE) RM-673 Remote Commander (1) (EXCEPT PORTUGUESE) IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.



TRINITRON® COLOR TV
SONY®

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK
 ON THE SCHEMATIC DIAGRAMS, EXPLODED
 VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
 SAFE OPERATION. REPLACE THESE COMPONENTS
 WITH SONY PARTS WHOSE PART NUMBERS APPEAR
 AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
 PUBLISHED BY SONY.

SECTION 1

GENERAL

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

1-1. FIRST OF ALL

- 1 Connect the aerial to the \square socket on the rear of the set.
This socket receives the standard 75-ohm aerial plug.

- 2 Plug in the set.

- 3 Tune in the available channels.

Use the buttons inside the front panel. To open the panel, press the center.

To tune in all channels automatically :

- 1 Press \diamond (Preset)
- 2 Press PROGR to select the program position from which tuning is to start.
- 3 Press \diamond (Auto programing).

The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in step 2.

When tuning has been completed, the set returns to the position where tuning began.

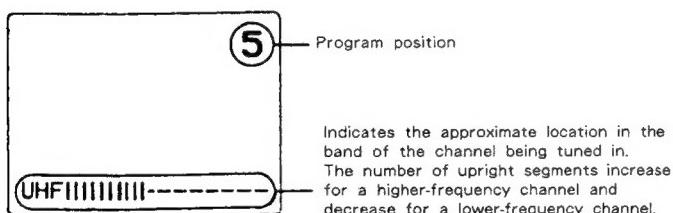
To tune in a channel in any desired program position.

- (e. g. the position with the same number as the channel) :
- 1 Press \diamond (Preset).
 - 2 Press PROGR to select the desired program position.
 - 3 Press C (Clear).
 - 4 Press $\#$ (Search) repeatedly until the desired channel appears.
 - 5 Repeat steps 2 to 4 for all channels, if required.
 - 6 Press \diamond (Preset) again.

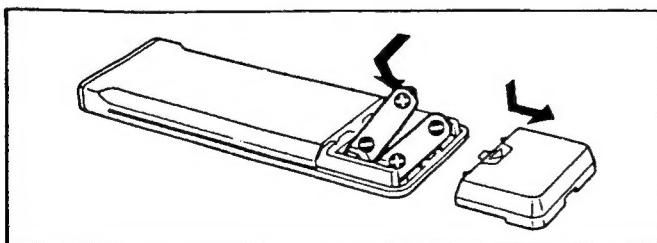
To have the unused program positions skipped when PROGR+ or PROGR- is pressed :

- 1 Press \diamond (Preset).
- 2 Press PROGR to select the unused position.
- 3 Press C (Clear).
- 4 Repeat steps 2 and 3 for all unused position.
- 5 Press \diamond (Preset) again.

On-screen display while tuning

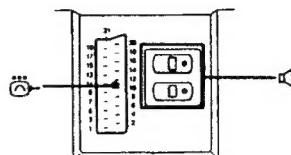


- 4 Insert two R6 batteries checking the correct polarity.



1-2. CONNECTING OTHER EQUIPMENT

connectors on rear set



L/G/S	Left external speaker terminal (2-pin DIN)	Connect to external speakers. The TV speakers will be disconnected. Speakers 8-16 Ω .
R/D/D	Right external speaker terminal (2-pin DIN)	
	21-pin connector (CENELEC standard)	Connect to a VTR micro computer, etc. using an optional connection cord. The picture of the TV channel being received is always output.

VTR operation using the supplied Commander

Remote operation of the VTR (8mm only) is limited to the features and functions of the VTR. For further details, refer to the VTR manual. When watching a video with the VTR connected to the connector, set the channel for the video to the program number 0 or any empty channel between 20 and 29.

Note

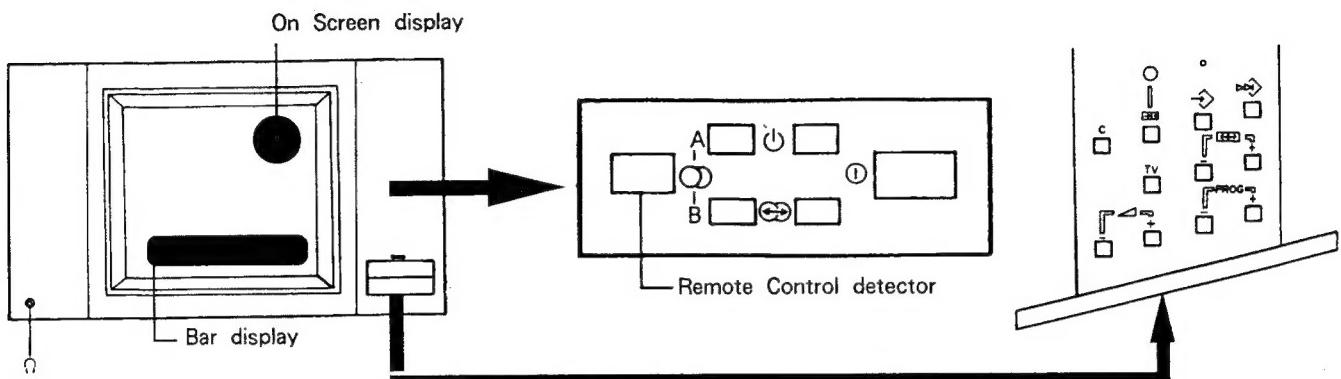
Move the VTR away from the TV, if the picture or sound is distorted.

21 Pin Connector

Pin No	Signal	Signal level
1	Audio output B (right)	Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm*
2	Audio input B (right)	Standard level : 0.5 Vrms Input impedance : More than 10 k ohms*
3	Audio output A (left)	Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm*
4	Ground (audio)	
5	Ground	
6	Audio input A (left)	Standard level : 0.5 Vrms Input impedance : More than 10 k ohms*
7	Blue input	0.7 V ±2 dB, 75 ohms, positive
8	Function select (AV control)	High state (9.5–12 V) : Part mode Low state (0–2 V) : TV mode Input impedance : More than 10 k ohms Input capacitance : Less than 2 μF
9	Ground (green)	
10	Open	
11	Green/Green with sync input	Green signal : 0.7 V ±2 dB, 75 ohms, positive Green with sync signal : 1 V ±2 dB, 75 ohms, positive
12	Open	
13	Ground (red)	
14	Ground (blanking)	
15	Red input	(Same as Pin 7)
16	Blanking input (Ys signal)	High state (1–3 V) Low state (0–0.4 V) Input impedance : 75 ohms
17	Ground (video output)	
18	Ground (video input)	
19	Video output	1 V ±2 dB, 75 ohms, positive Sync : 0.3 V (-3, ±10 dB)
20	Video input	1 V ±2 dB, 75 ohms, positive Sync : 0.3 V (-3, ±10 dB)
21	Common ground (plug, shield)	

* at 20 Hz–20 kHz

1-3. FUNCTION OF CONTROLS

**On the set****On-screen display**

Indicates program numbers and input modes.

Bar display

Indicates the level of volume, color, brightness, contrast, bass, treble and balance.

Note on function.

When the volume is at the minimum setting the balance function will not operate.

① Power switch

To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operation of the set.

Note

To ensure correct operation, push the switch in fully.

 standby indicator

Lights up brightly when the set is in the standby mode.

Note

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

 space sound indicator

Lights up when on the Remote Commander is pressed.

A/B indicators

One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)

Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for both channels.

Remote control detector

Point the Remote Commander towards this detector.

Inside the panel **headphones jack (stereo minijack)** **SEARCH buttons**

Press to tune finely a weak channel manually, if required. When pressed, the indicator (AFT) goes off and the AFT circuit does not function on the selected channel.

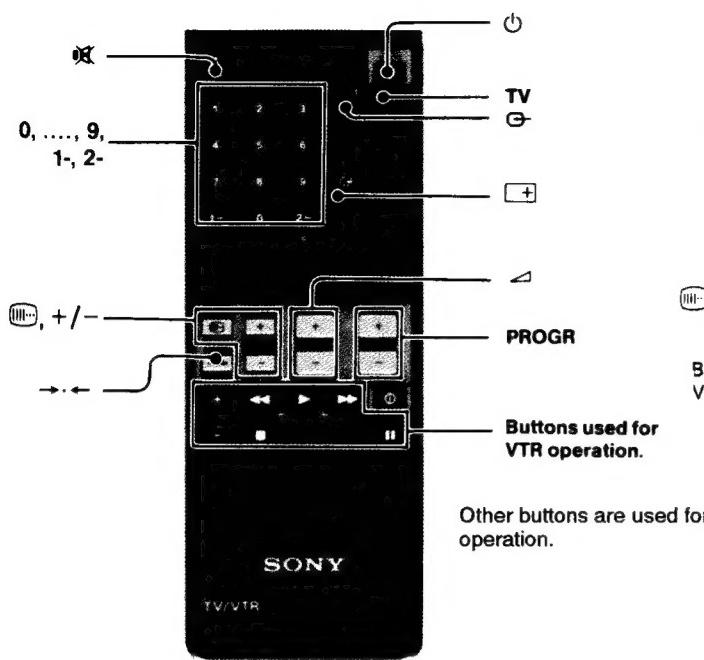
To restore the AFT circuit on this channel, press (AFT) so that the indicator lights up.

 AFT button and indicator

Normally, press so that the indicator lights up. The AFT circuit automatically tunes finely the channels for the best possible picture.

volume buttons

PROGR+, PROGR- program scan buttons



**RM-670
FOR PORTUGUESE**

On the Remote Commander

To operate the Commander, point it toward the remote control detector.

🔇 mute button

0, ..., 9, 1-, 2- buttons

To tune into:
program 15, press 1- and 5
program 25, press 2- and 5

A/B button

Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

🔊 + / - analog select buttons

Press 🔊.
⌚ will appear on the screen. Adjust by pressing + or -. Press 🔊 again and adjust ⚡ (color), then ⚡ (brightness), ⚡ (bass), ⚡ (treble) and ⚡ (balance).

→ • ← reset button

Press to reset color and contrast and brightness to factory-set levels.

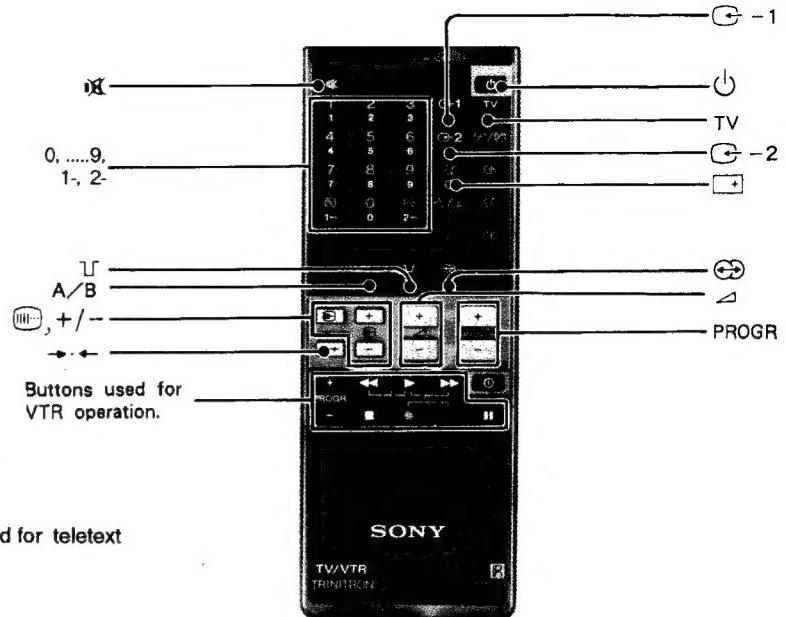
⌚ standby button

Press to change to the standby mode. Use this button to turn off the set for short periods of time.
To turn on the set, press TV or the program number; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

TV button

Press to change to the TV mode from the standby or ⌚ input modes.



**RM-673
EXCEPT PORTUGUESE**

⌚ input button

Press to view the input picture coming in through the 🔊 connector.

"⌚" lights up on the screen.

Press TV or the program number to return to the TV mode.

🔉 loudness button

Press to emphasize high and low notes.

🔊 on-screen display button

Press to make the display appear on the screen.
Press again to make them disappear.

🔗 space sound button

Press to obtain special acoustic effects.

↔ volume buttons

PROGR program scan buttons

Note

Buttons not referred to on this page or next page do not operate.

1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Operation

- 1 Select the TV channel for the desired teletext service.
- 2 Press (TEXT/MIX) to display the teletext service. Once has been pressed, the TV channel cannot be changed.
- 3 Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletext service can be displayed directly from the standby mode, by pressing .

To receive the teletext service of a different TV channel.

- 1 Press TV to return to the TV mode.
- 2 Select the desired TV channel.
- 3 Press .

Note

To receive the teletext service accurately, keep inside the panel switched on during teletext operation.

To display the index page.

Press (INDEX).

If the necessary signal is not being broadcast, page 100 is displayed.

To rapidly access the next or preceding page

press (PAGE+) or (PAGE-).

To superimpose the teletext display on the TV picture.

Press twice from TV mode.

Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed.

Press (TEXT CL).

This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated /changed.

Press HOLD. The HOLD symbol appears at the top of the screen.



To resume normal teletext reception, press TEXT/MIX.

To enlarge the teletext display.

Press .

Press once to enlarge the upper half of the display ; press again to enlarge the lower half of the display ; press again to return to the normal display.

To reveal concealed information such as the answers to a quiz

Press (REVEAL)

Press again to conceal the answers.

To adjust the contrast of the teletext display.

When in teletext mode, adjust by using the + or - keys adjacent to the key.

To watch the TV program while waiting for a requested page to be displayed.

- 1 Request new page.

- 2 Press to watch the TV program.

The requested page number appears at the top left of the screen.

When the requested page has been captured, the page number is displayed in the top left hand corner of the screen.

P101

To view this page, press .

To have a requested page displayed at a predetermined time.

- 1 Request a time coded page (e. g. alarm page).

- 2 Press (TP ON).

"T****" will appear at the bottom of the screen.

T****

- 3 Enter your request time with the number buttons, using four digits. For example, 07 : 30.

T0730

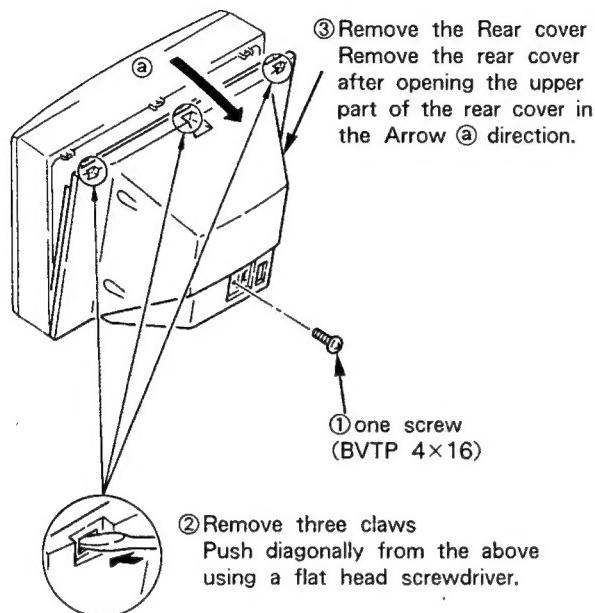
To watch the TV program until the requested time, press . At the requested time, the page number will be displayed at the bottom of the screen.

To view this page, press .

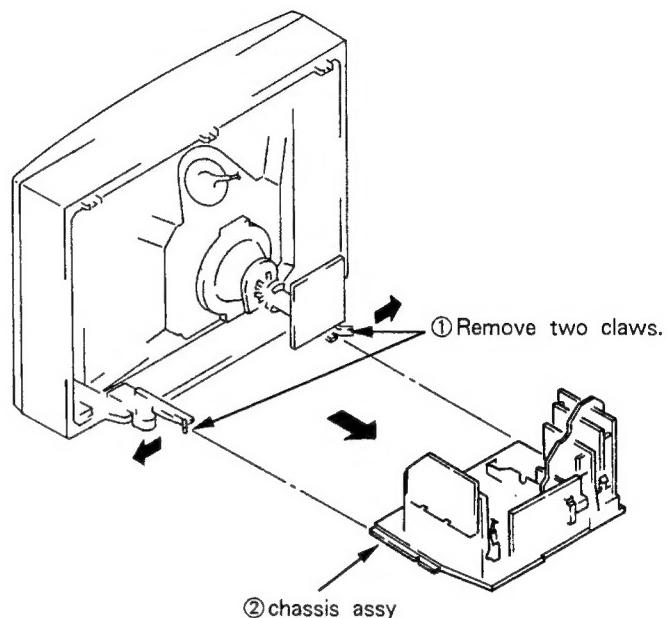
To cancel the request, first ensure that the teletext page is displayed, then press (TP OFF).

SECTION 2 DISASSEMBLY

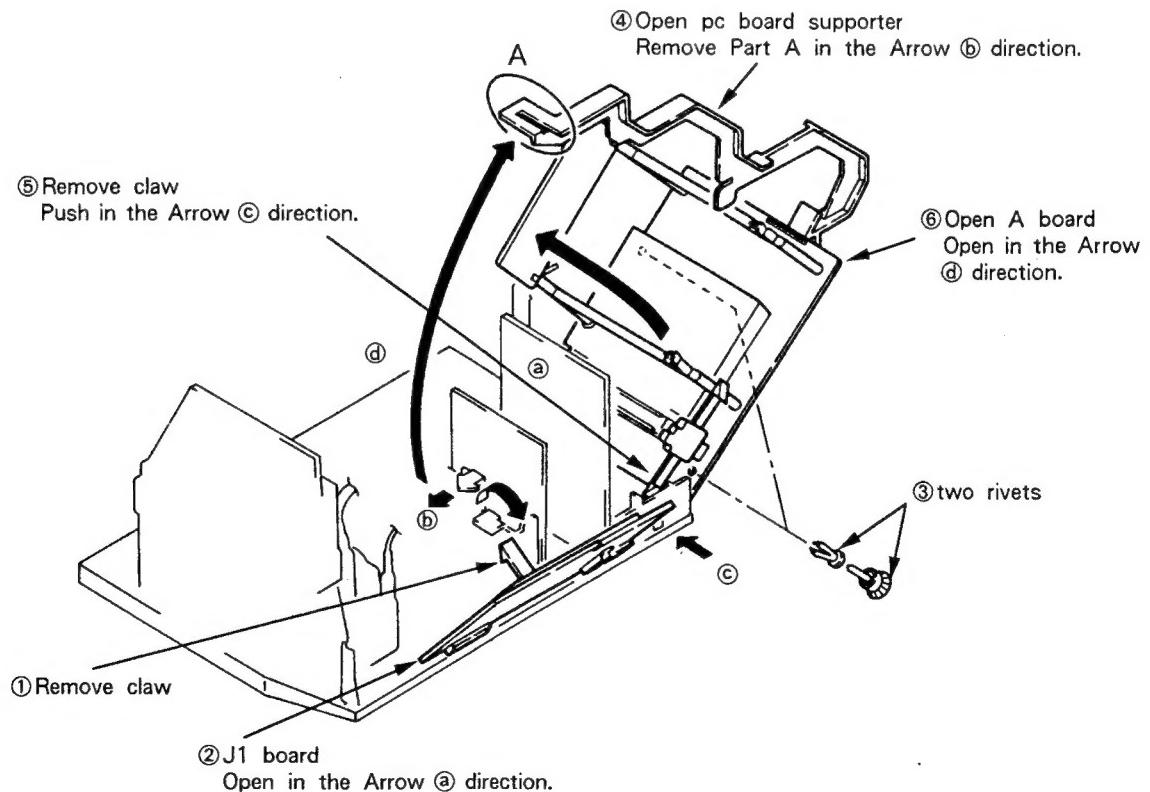
2-1. REAR COVER REMOVAL



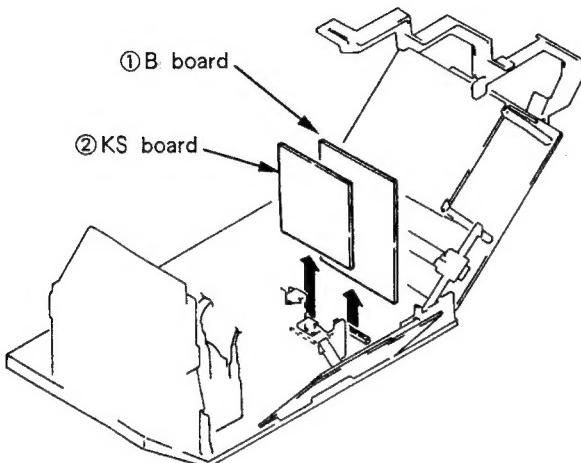
2-2. CHASSIS ASSY REMOVAL



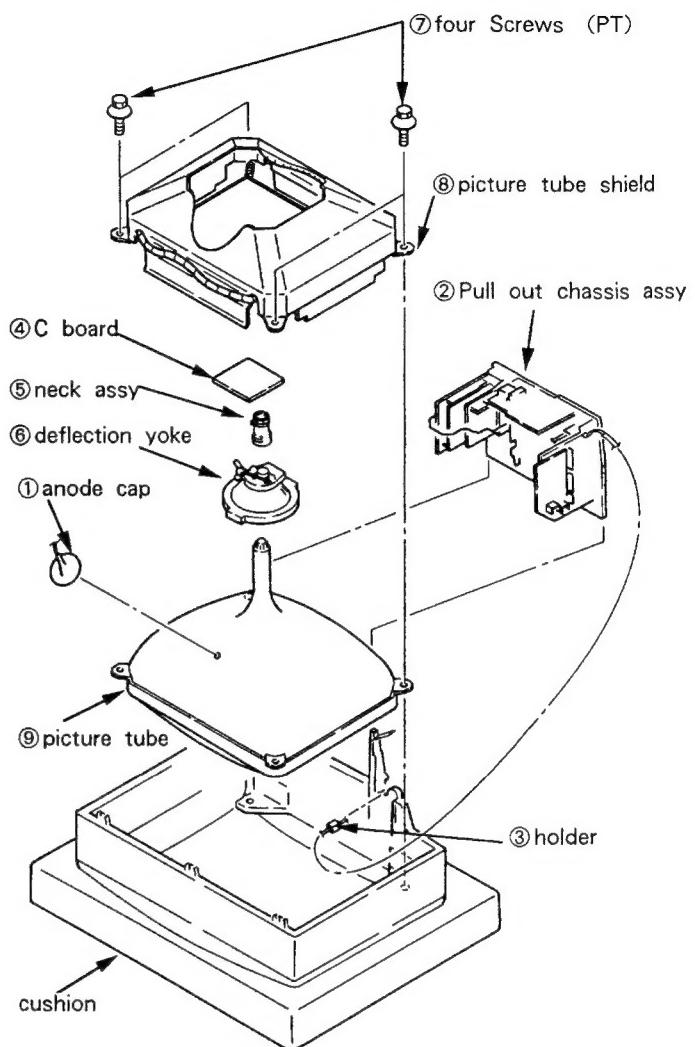
2-3. J1, A AND V BOARDS REMOVAL



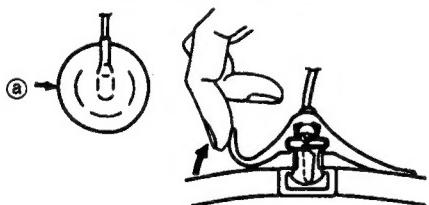
2-4. KS AND B BOARDS REMOVAL



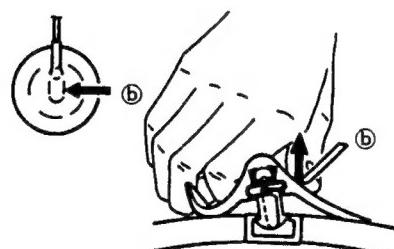
2-5. PICTURE TUBE REMOVAL



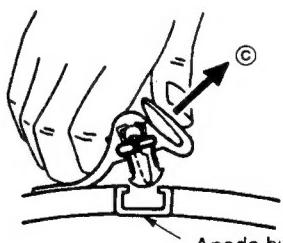
- REMOVAL OF ANODE-CAP
- REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ④.



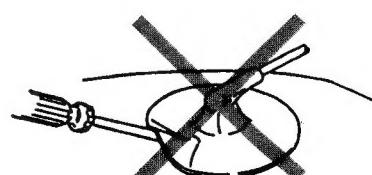
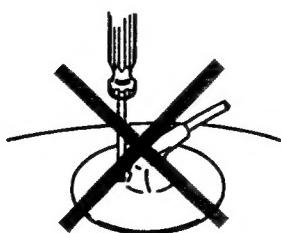
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⑤.



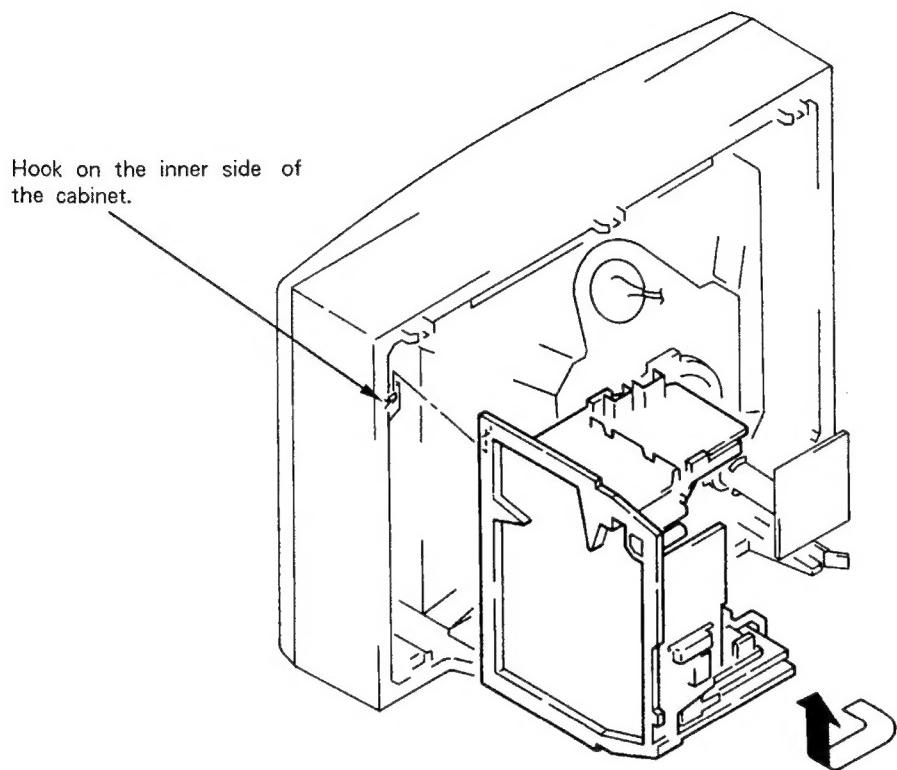
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⑥.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or hurt the rubber.



2-6. SERVICE POSITION



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted :

CONTRAST control 80% (or Normal by Commander)
 BRIGHTNESS control 50%

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color Bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

1. Input a raster signal with the pattern generator.
 CONTRAST } normal
 BRIGHTNESS }
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 3-1 to 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3-1)
5. Switch over the raster signal to blue and green and confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corners is not right, adjust by using the magnet. (Fig. 3-4)

Fig.3-1

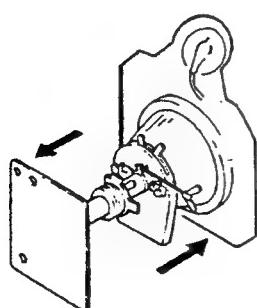


Fig.3-2

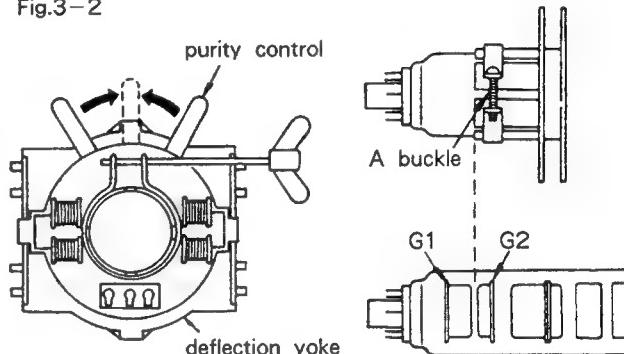


Fig.3-3

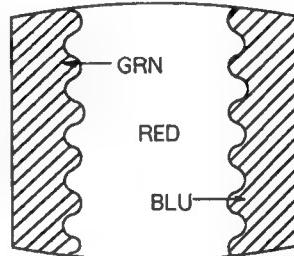
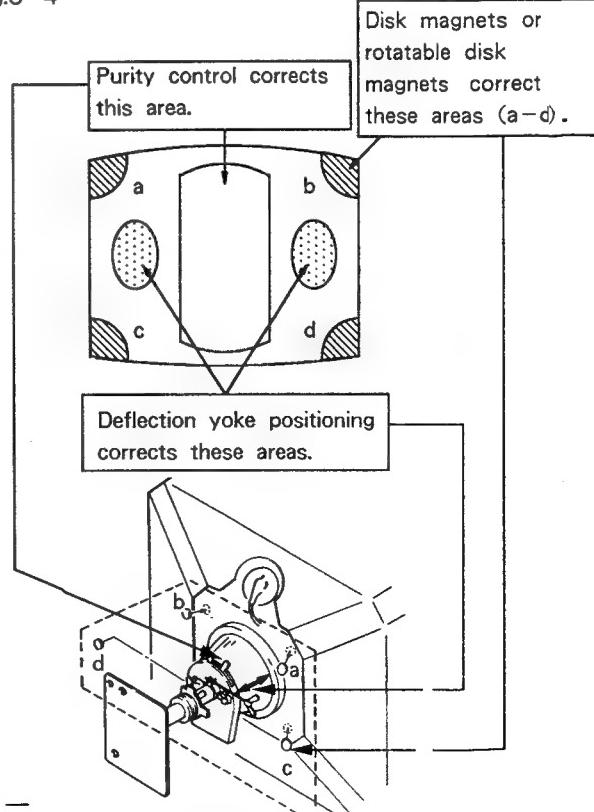


Fig.3-4

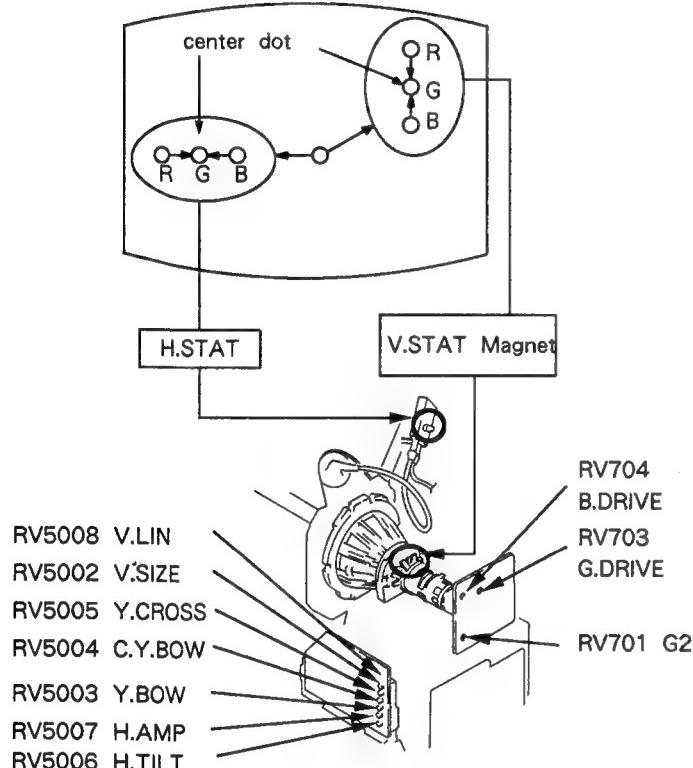


3-2. CONVERGENCE

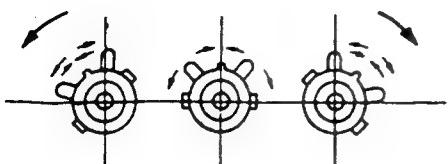
Preparation :

- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

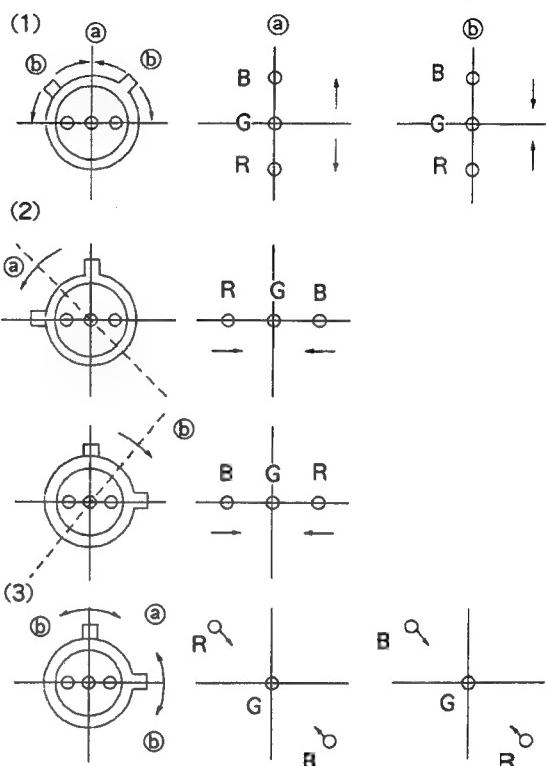
(1) Horizontal and Vertical Static Convergence



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen.(Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen.(Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

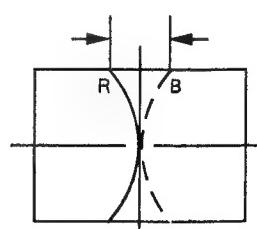
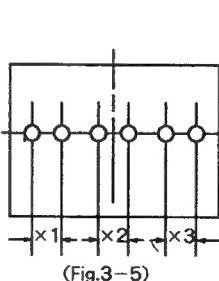


4. When the V. STAT magnet is moved in the direction of arrow ④ and ⑤, red, green and blue dots move as shown below.

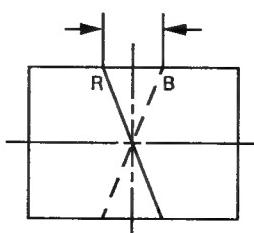


(2) Adjustment of Dynamic Convergence

1. Adjust H TILT (RV-5006) so that X₁, X₂, and X₃, are equal.
2. Adjust H AMP (RV-5007) so that X₂, and X₃, are equal.
3. Adjust H STATIC so that the dots are overlapped.
4. If dynamic convergence is not sufficiently adjusted after performing the above steps, repeat Steps 1 through 3 (Fig.3-5)



Adjust Y. BOW (RV-5003) to correct the arrow-shaped misconvergence along the y axis. (Fig.3-6)

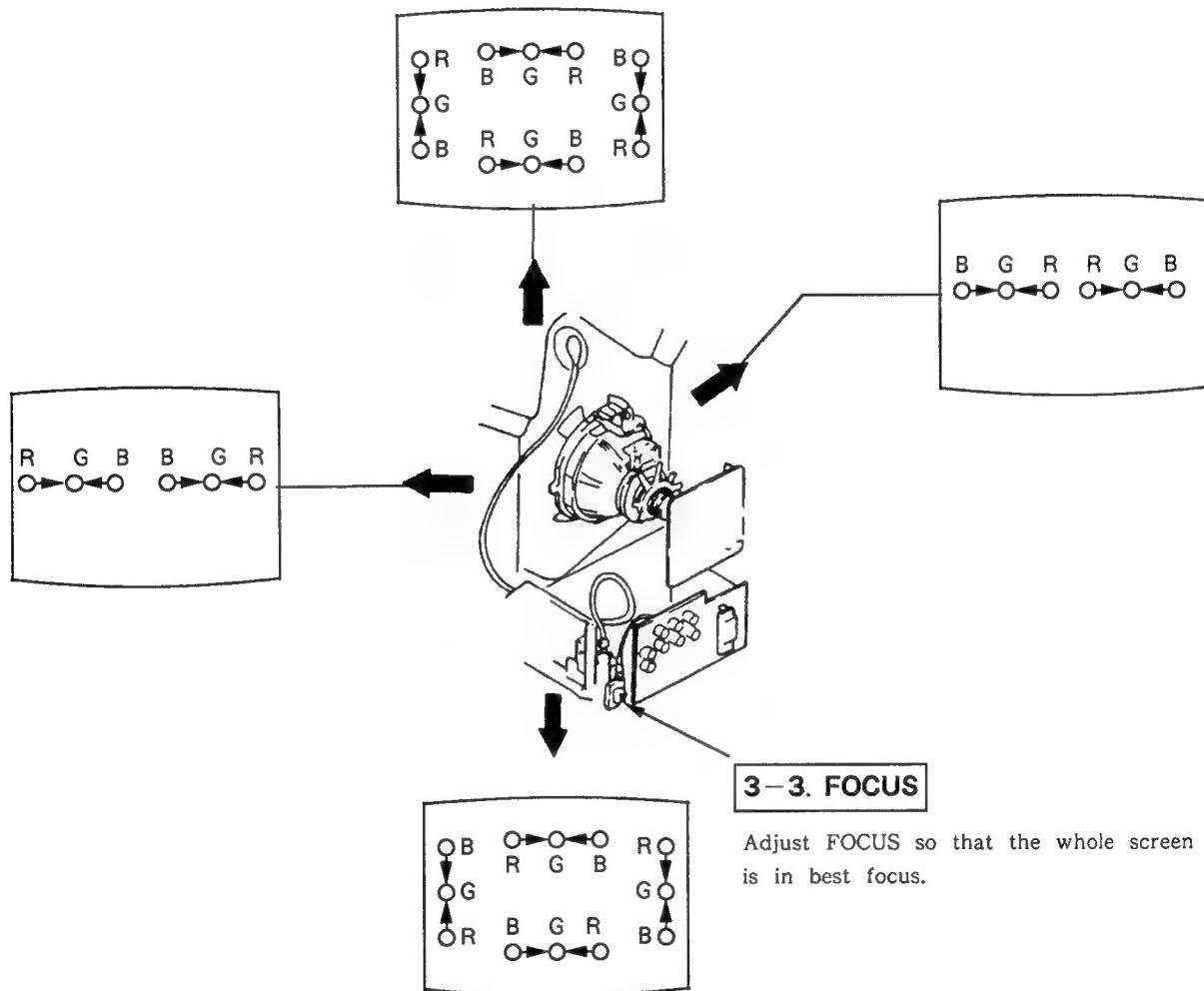


Adjust Y. CROSS (RV-5005) to correct the cross misconvergence along the y axis. (Fig.3-7)

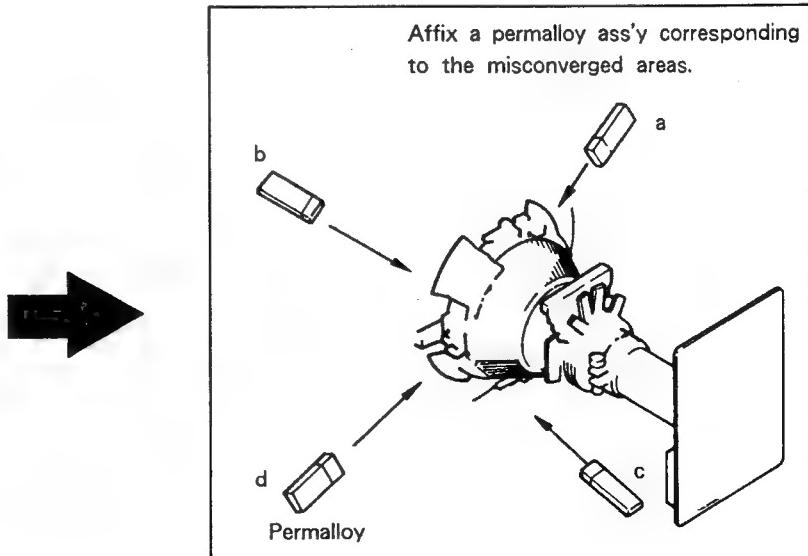
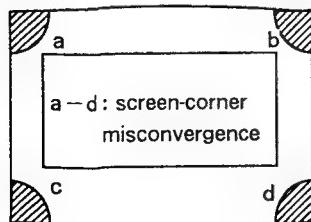
(3) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
1. Slightly loosen deflection yoke screw.
 2. Remove deflection yoke spacers.
 3. Move the deflection yoke for best convergence as shown below.
 4. Tighten the deflection yoke screw.
 5. Install the deflection yoke spacers.



(4) Screen-corner Convergence



3-4. WHITE BALANCE

(Screen (G2) Setting)

1. Input dot signals from the pattern generator.
2. Set the picture BRIGHTNESS control to the minimum level.
3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
4. While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

(White Balance Adjustment)

1. Input all-white signals from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

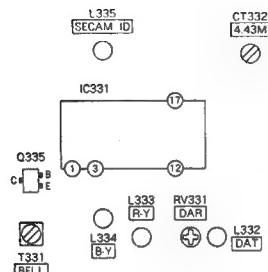
SECTION 4

CIRCUIT ADJUSTMENTS

4-1. B BOARD ADJUSTMENTS

-B BOARD-

Component Side

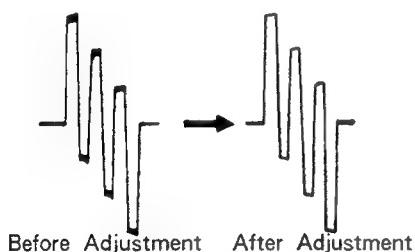


REF OSC Adjustment (CT332)

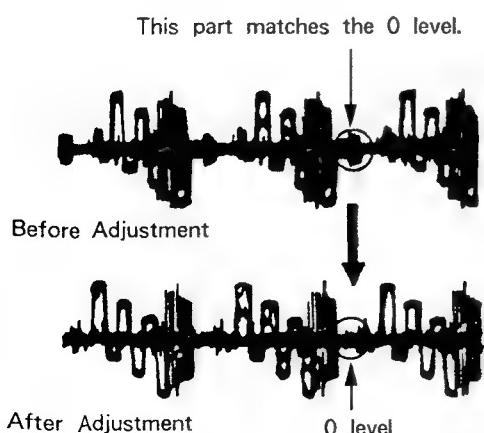
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑯ of IC331 and ground.
3. Adjust CT332 to obtain color synchronization.
4. Remove the jumper wire from IC331.

1H DELAY LINE Adjustment (L332, RV331)

1. Input a PAL COLOR BAR pattern.
2. Connect the oscilloscope to pin ③ (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope.
3. Adjust L332 to minimize the double waveform outline.



4. Input a PAL TEST COLOR BAR pattern.
5. Rotate the RV331 VR and adjust till the ANT PAL part of the waveform matches the 0 level.



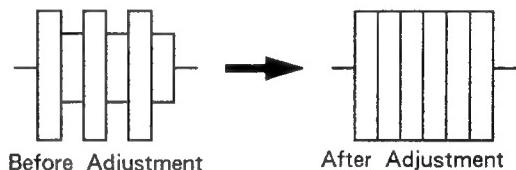
6. L332 and RV331 affect each other, so repeat till the conditions of both are met.

SECAM ID Adjustment (L335)

1. Input SECAM COLOR BAR signal.
2. Connect a Digital Multimeter at pin ⑩ of IC331.
3. Adjust L335 so that the indicator goes up to the maximum.

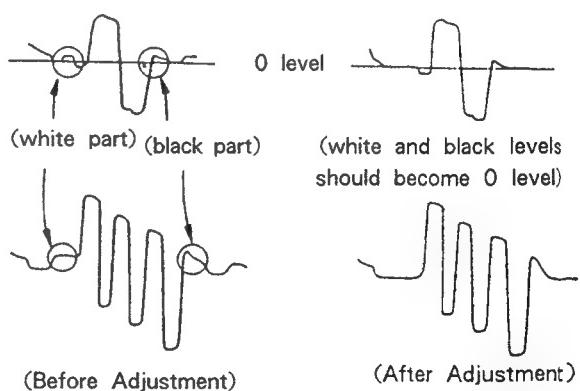
BELL FILTER Adjustment (T331)

1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the emitter of Q335.
3. Adjust T331 so that the waveform becomes flat.

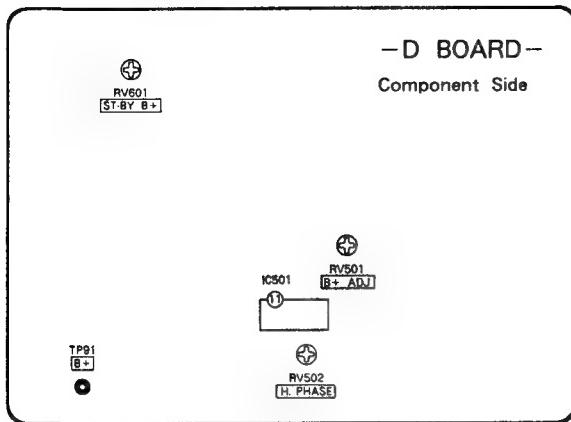


SECAM DISCRI Adjustment (L333, L334)

1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope at pin ① of IC331.
3. Adjust L333 so that white and black part of the waveform of pin ① becomes 0 level.
4. Connect an oscilloscope at pin ③ of IC331.
5. Adjust L334 so that white and black part of the waveform of pin ③ becomes 0 level.



4-2. D BOARD ADJUSTMENTS



+B Adjustment (RV501)

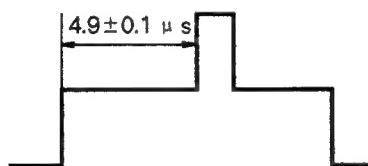
1. Connect a Digital Multimeter to TP91.
2. Adjust RV501 so that the voltage becomes 135 ± 0.2 V.

ST-BY +B Adjustment (RV601)

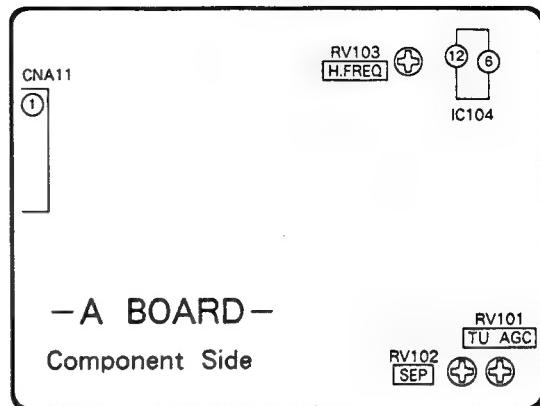
1. Set up \odot standby (Remote Commander) mode.
2. Connect the digital multimeter to TP91.
3. Adjust RV601 so that the voltage becomes 135 ± 3 V.
4. Release the \odot standby (Remote Commander) mode.

H. PHASE Adjustment (RV502)

1. Input the PAL TEST COLOR BAR pattern.
2. Set the CONTRAST and BRIGHTNESS controls to the standard positions.
3. Set RV1508 (H. CENT) to the mechanical center position.
4. Connect an oscilloscope to pin ⑪ (SPC OUT) of IC501.
5. Rotate RV502 and adjust Block T to $4.9 \pm 0.1 \mu s$.



4-3. A BOARD ADJUSTMENTS



TUNER AGC Adjustment (RV101)

1. Tune in an off-air signal.
2. Adjust RV101 so that snow noise and cross-modulation just disappear from the picture.

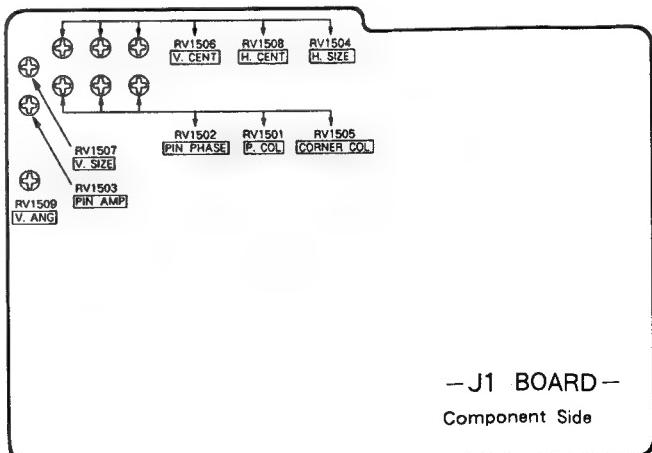
STEREO SEPARATION Adjustment (RV102)

1. Input stereo signal (L-CH 1kHz, R-CH 400Hz).
2. Check the stereo indicator.
3. Connect an oscilloscope to the pin ① (L) of CNA11 through band pass filter of 1kHz.
4. Adjust RV102 so that 1kHz voltage goes down to the minimum.

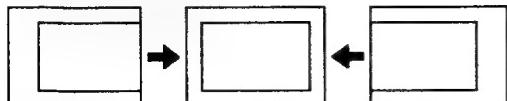
H. FREQ. Adjustment (RV103)

1. Input PAL COLOR pattern.
2. Short circuit between pin ⑫ of IC104 and ground.
3. Connect a frequency counter to the pin ⑯ of IC104 through a probe of 10 : 1.
4. Adjust RV103 so that H. frequency becomes $15,625 \pm 50$ Hz.

4-4. J1 BOARD ADJUSTMENTS



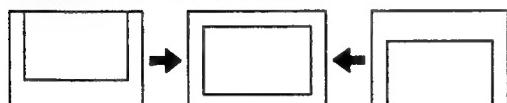
RV1508
H. CENT (HORIZONTAL CENTER)



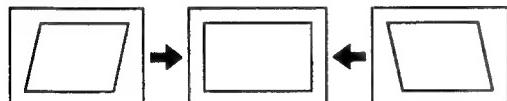
RV1504
H. SIZE (HORIZONTAL SIZE)



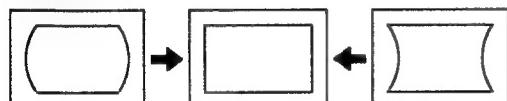
RV1506
V. CENT (VERTICAL CENTER)



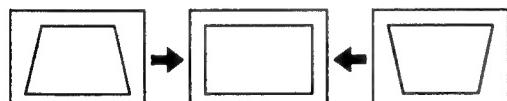
RV1509
V. ANGLE (VERTICAL ANGLE)



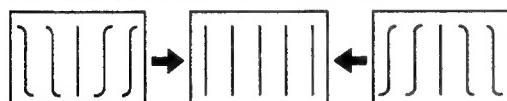
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



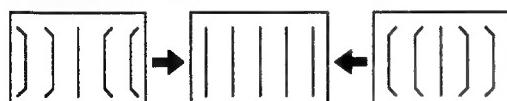
RV1502
PIN PHASE (PINCUSHION PHASE)



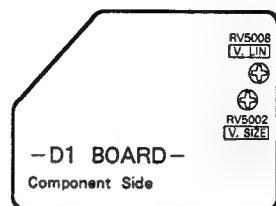
RV1501
PIN COR (PINCUSHION CORRECT)



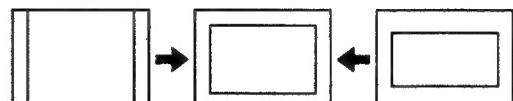
RV1505
CORNER COR (CORNER CORRECT)



4-5. D1 BOARD ADJUSTMENTS



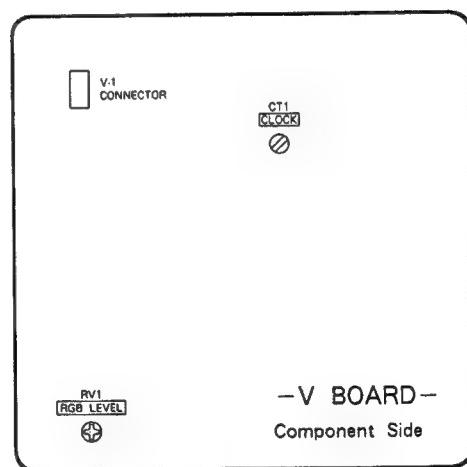
RV5002
V. SIZE (VERTICAL SIZE)



RV5008
V. LIN (VERTICAL LINEARITY)



4-6. V BOARD ADJUSTMENTS



Clock Adjustment (CT01)

1. Disconnect the V-1 connector.
2. Set up the TELE TEXT mode.
3. Adjust CT01 to stop pictures from scrolling.

RGB Level Adjustment (RV01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes 0.65V.

4-7. SUB ADJUSTMENTS

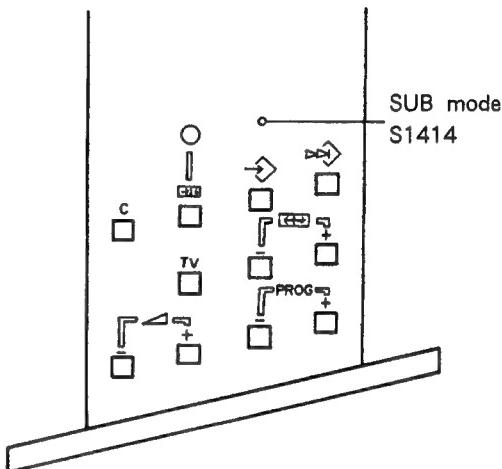
SUB BRIGHTNESS Adjustment

1. Receive and display a TEST COLOR BAR pattern.
2. Push $\rightarrow \cdot \leftarrow$ on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Reduce the $\textcircled{1}$ CONTRAST to the minimum level.
6. Adjust the $\textcircled{2}$ BRIGHTNESS control until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.
7. Push the AFT button. (SUB mode is cleared)

Where no TEST COLOR BAR pattern is available.

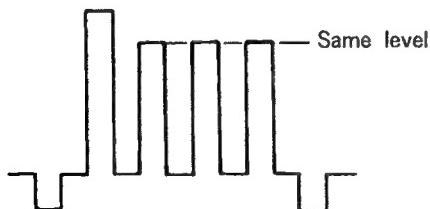
1. Display a COLOR BAR pattern.
 2. Push $\rightarrow \cdot \leftarrow$ on the remote commander to invoke the normal state.
 - Set the $\textcircled{3}$ COLOR to normal mode.
Steps 3-5 are the same as above.
 6. 20 IRE is close to blue, so adjust the $\textcircled{2}$ BRIGHTNESS control till blue is faintly luminous.
 7. Same as Step 7 above.
 8. Push $\rightarrow \cdot \leftarrow$ on the remote commander to invoke the normal state.
- * When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

- * When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.



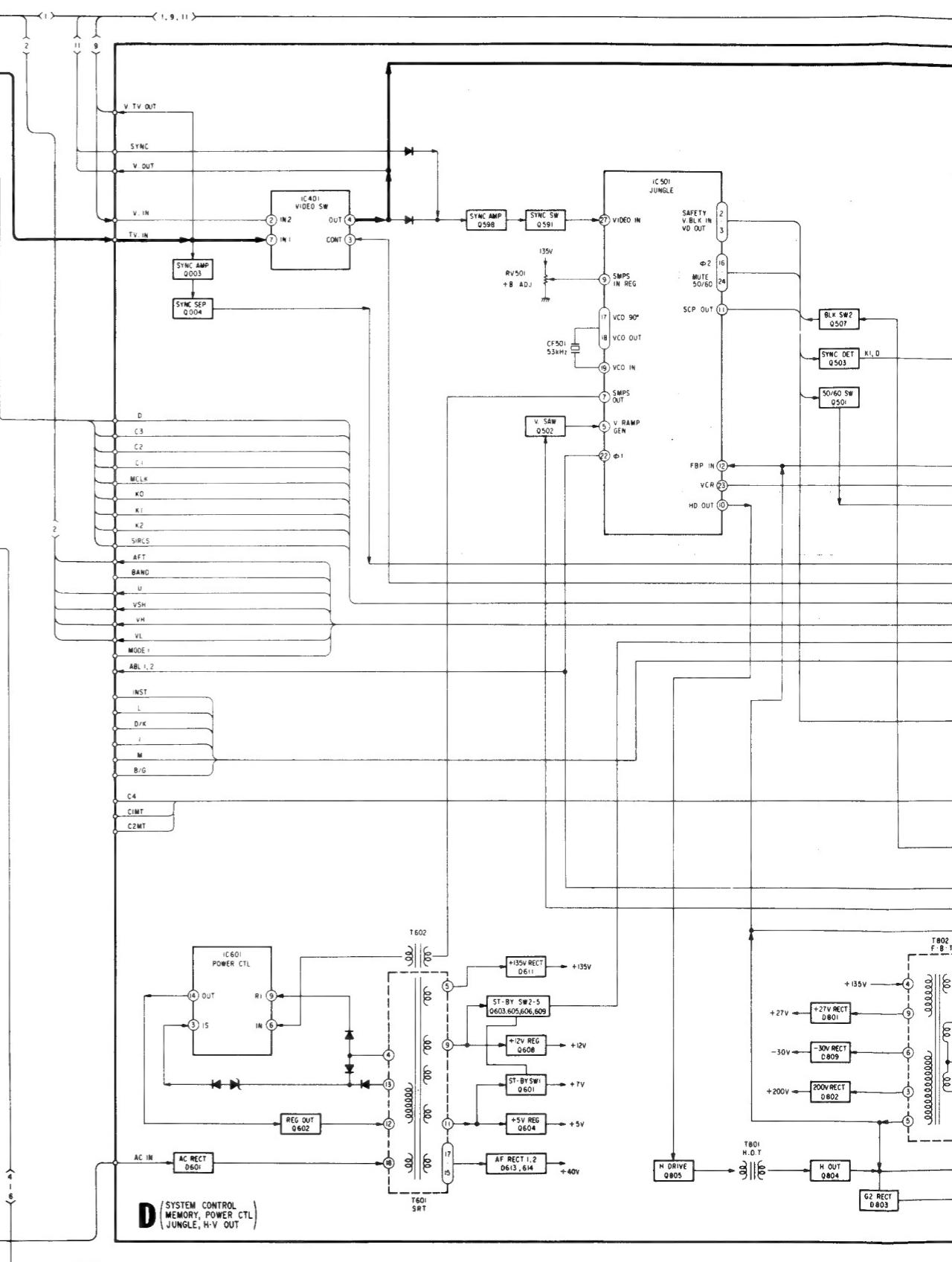
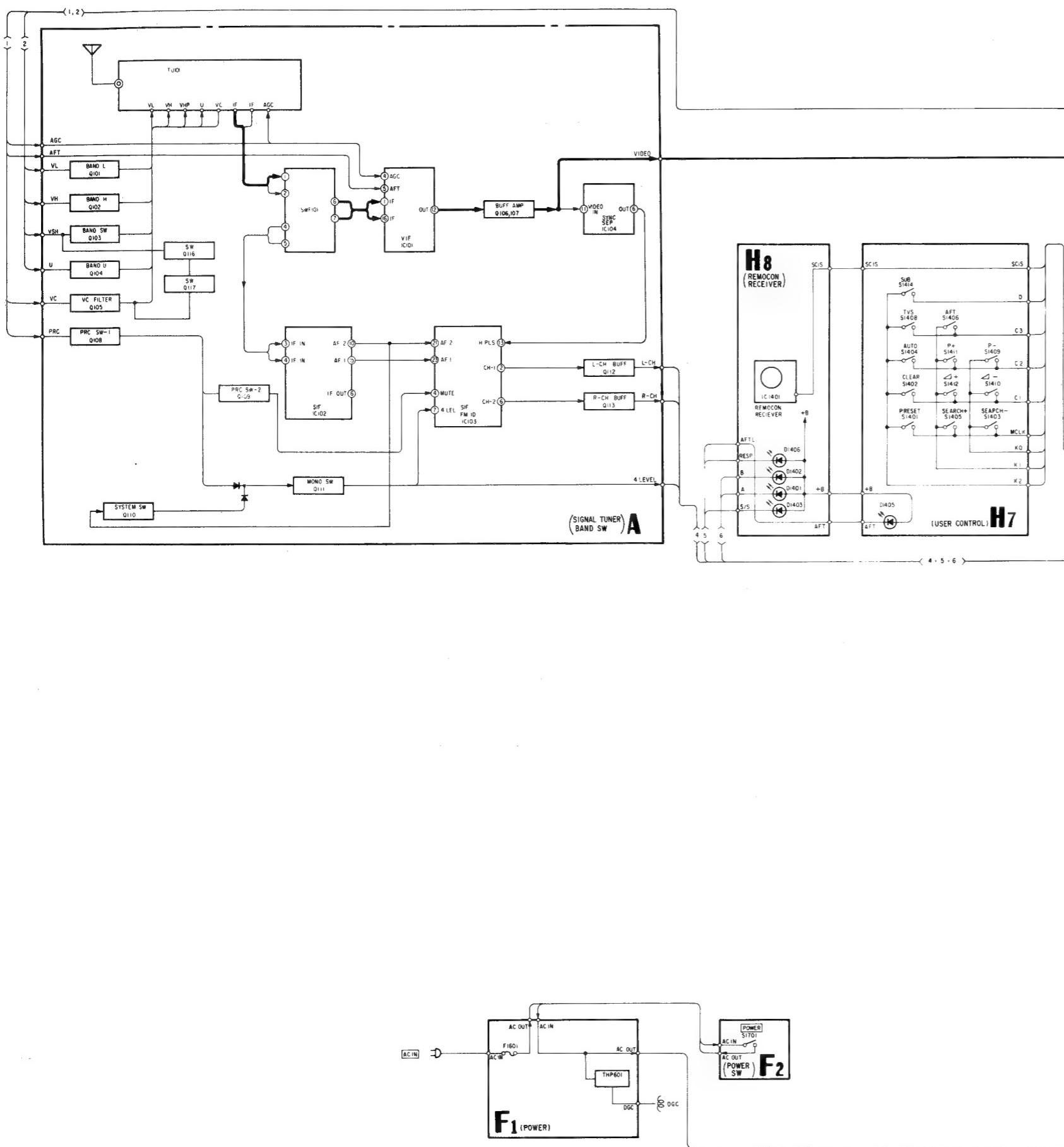
SUB COLOR Adjustment

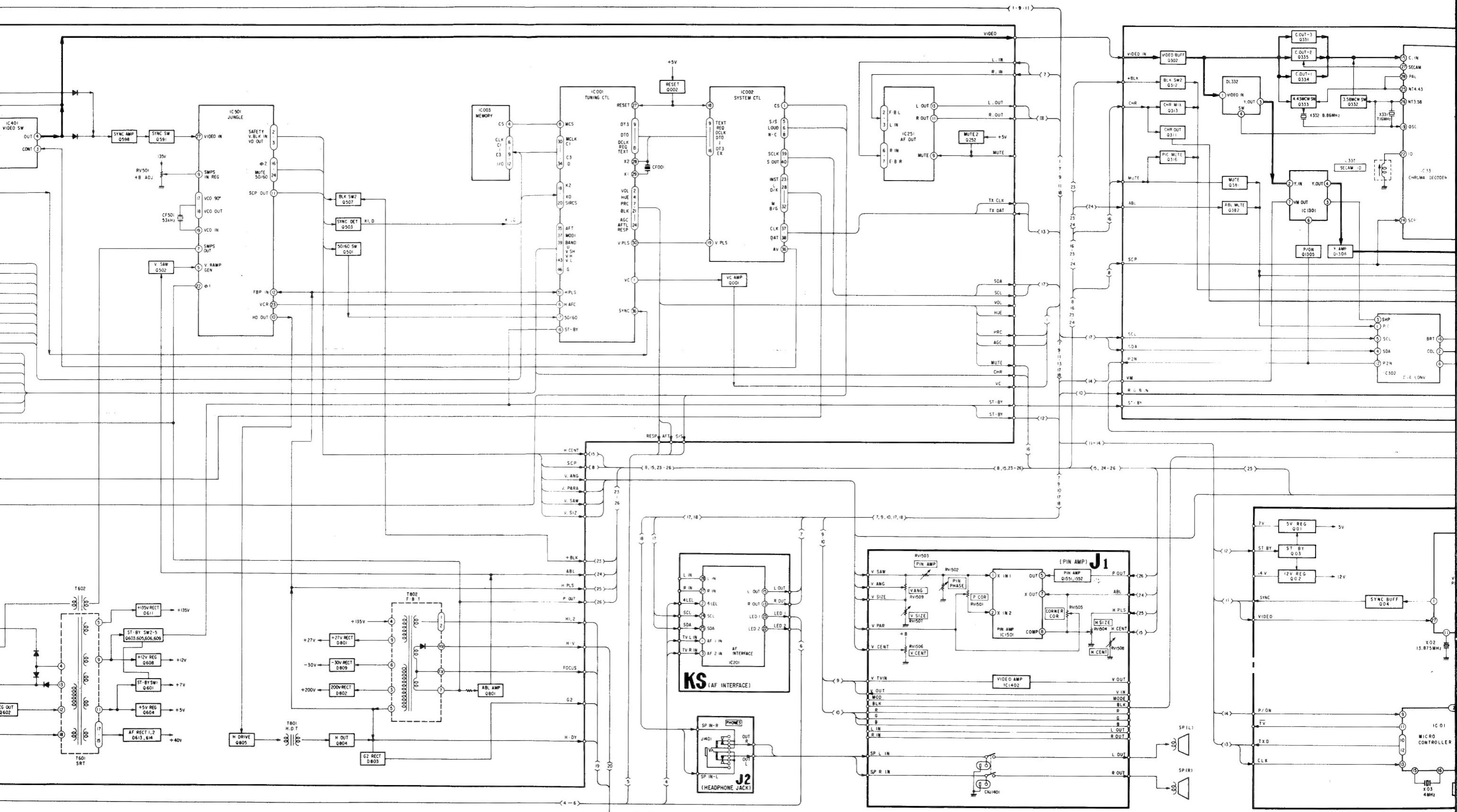
1. Display a COLOR BAR pattern.
2. Push $\rightarrow \cdot \leftarrow$ on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Adjust the COLOR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
6. Push the AFT button. (SUB mode is cleared.)

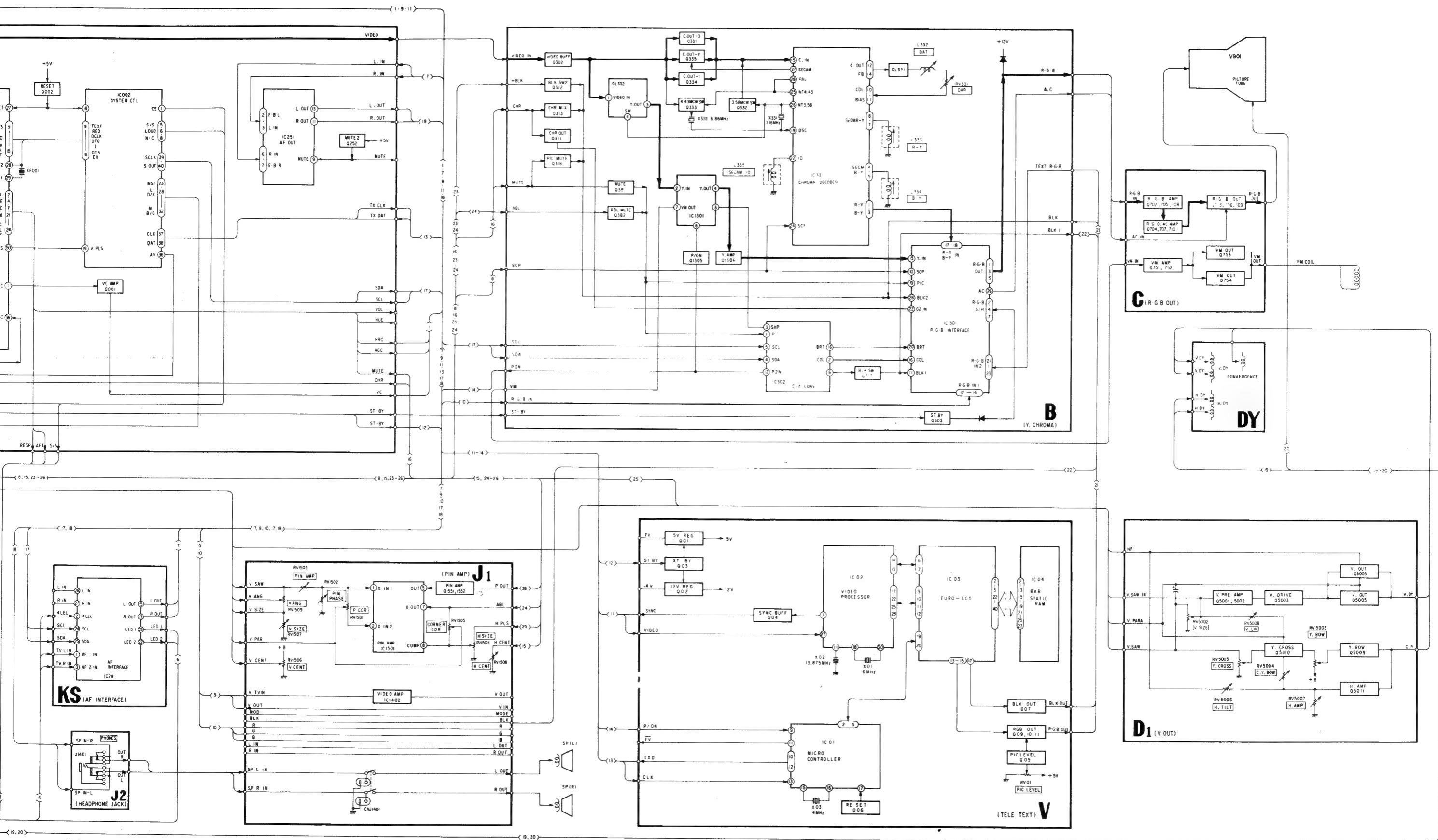


SECTION 5
DIAGRAMS

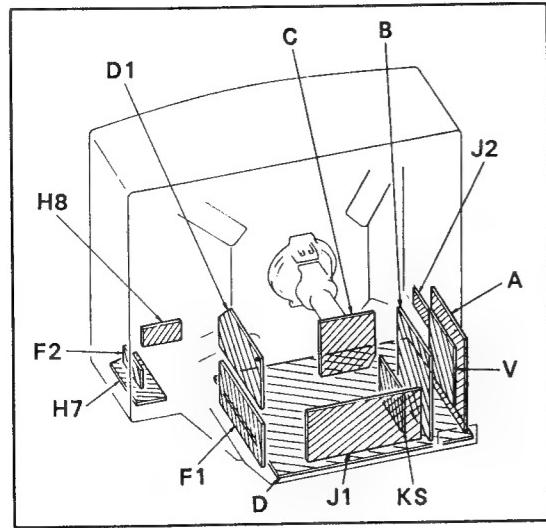
5-1. BLOCK DIAGRAM







5.2. CIRCUIT BOARDS LOCATION



Note :

- All capacitors are in μF unless otherwise noted.
- μF : μF 50 WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

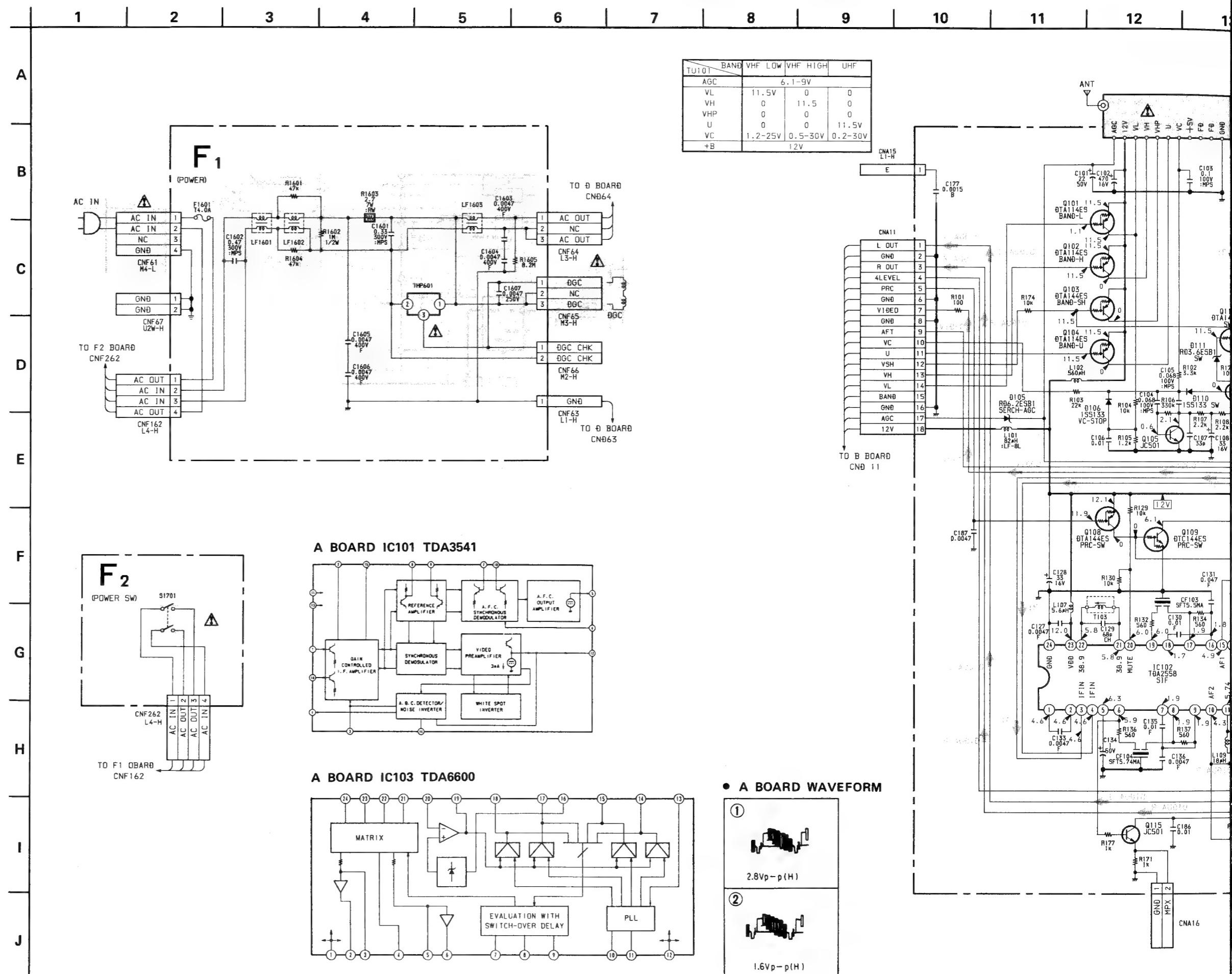
Pitch : 5 mm
Rating electrical power 1/4W

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10 M Ω digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- : adjustment for repair.
- Voltage variations may be noted due to normal production tolerance.
- : B+ bus.
- : B- bus.
- : signal path.

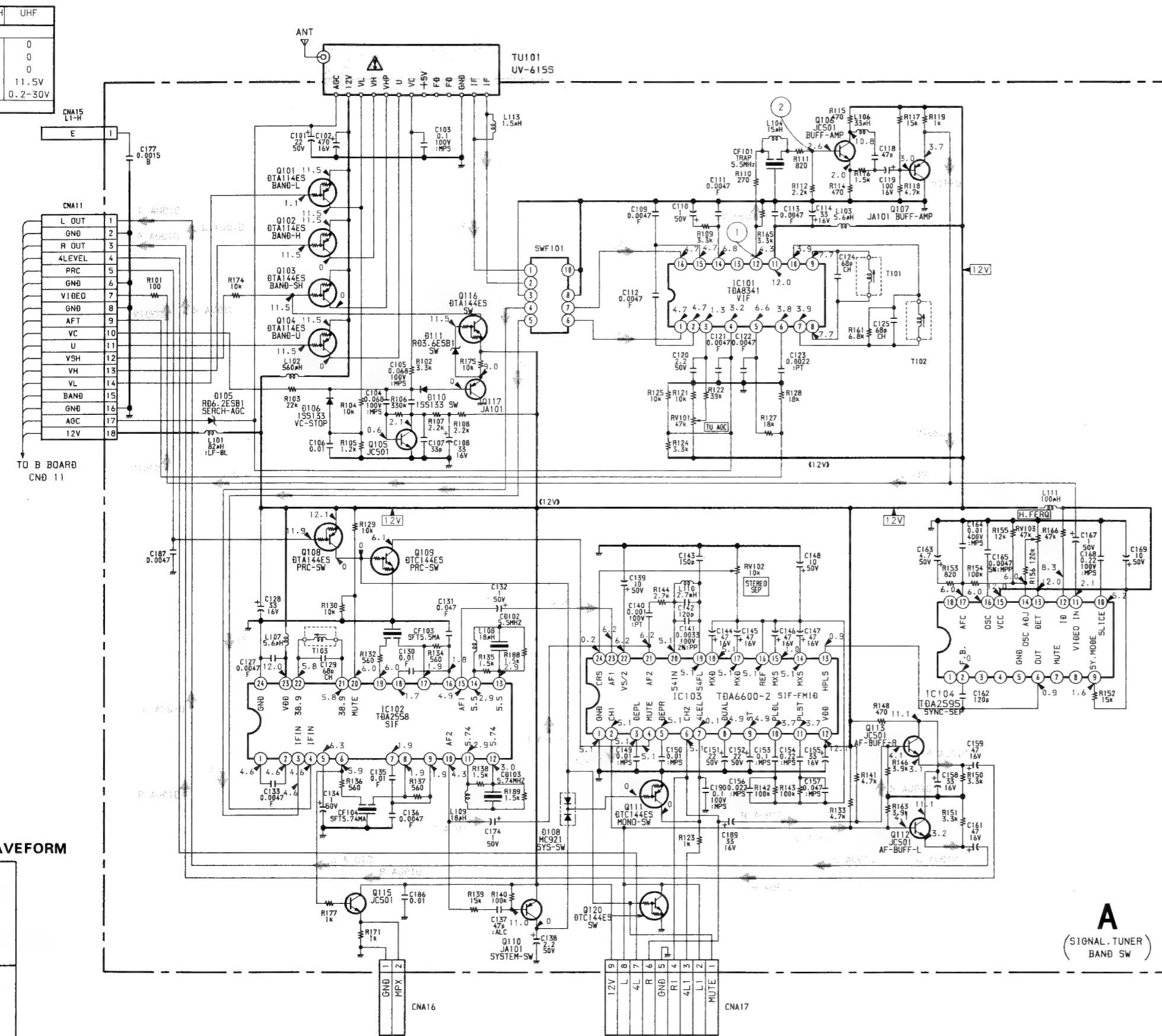
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

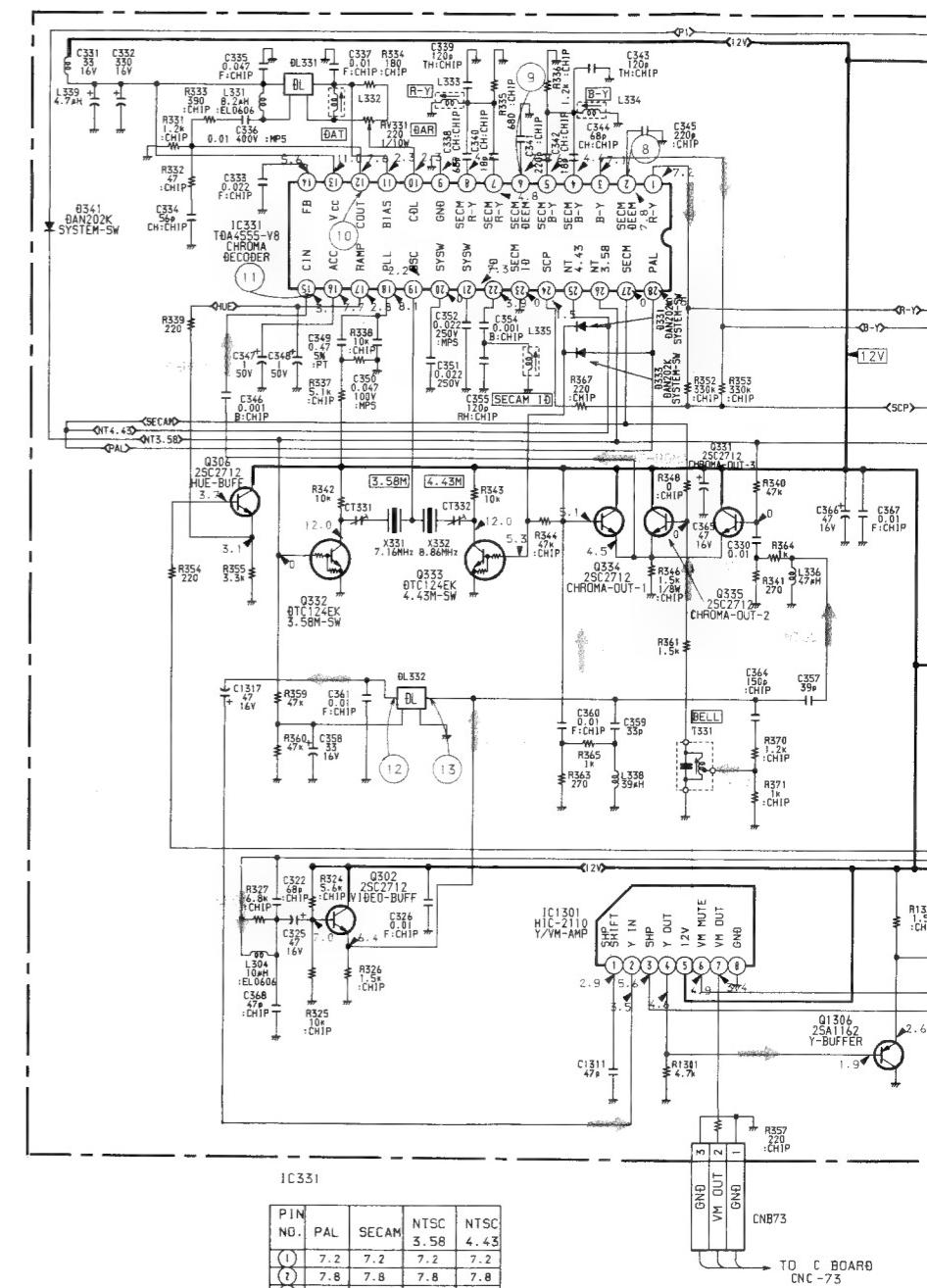
Note: The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.



9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25



A
(SIGNAL TUNER
BAND SW)



PIN NO.	PAL	SECAM	NTSC 3.58	NTSC 4.43
①	7.2	7.2	7.2	7.2
②	7.8	7.8	7.8	7.8
③	7.1	7.1	7.1	7.1
④	4.4	4.4	4.4	4.4
⑤	5.0	4.0	5.8	5.5
⑥	7.8	7.8	7.8	7.8
⑦	4.8	5.6	5.6	5.2
⑧	4.4	4.4	4.4	4.4
⑨	0	0	0	0
⑩	2.3	2.3	2.3	2.3
⑪	2.3	2.3	2.3	2.3
⑫	7.6	7.6	7.6	7.6
⑬	12.0	12.0	12.0	12.0
⑭	5.6	5.6	5.6	5.6
⑮	3.1	3.1	3.1	3.1
⑯	7.7	7.7	7.7	7.7
⑰	2.8	2.8	2.8	2.8
⑱	7.4	7.4	7.4	7.4
⑲	2.2	2.2	2.2	2.2
⑳	0	0	0	0
㉑	7.3	7.3	7.3	7.3
㉒	3.9	3.9	3.9	3.9
㉓	0	0	0	0
㉔	1.5	1.5	1.5	1.5
㉕	0	0	0	5.5
㉖	0	0	5.5	0
㉗	0	5.5	0	0
㉘	5.5	0	0	0

16

17

18

1

2

2

2

2

24

25

28

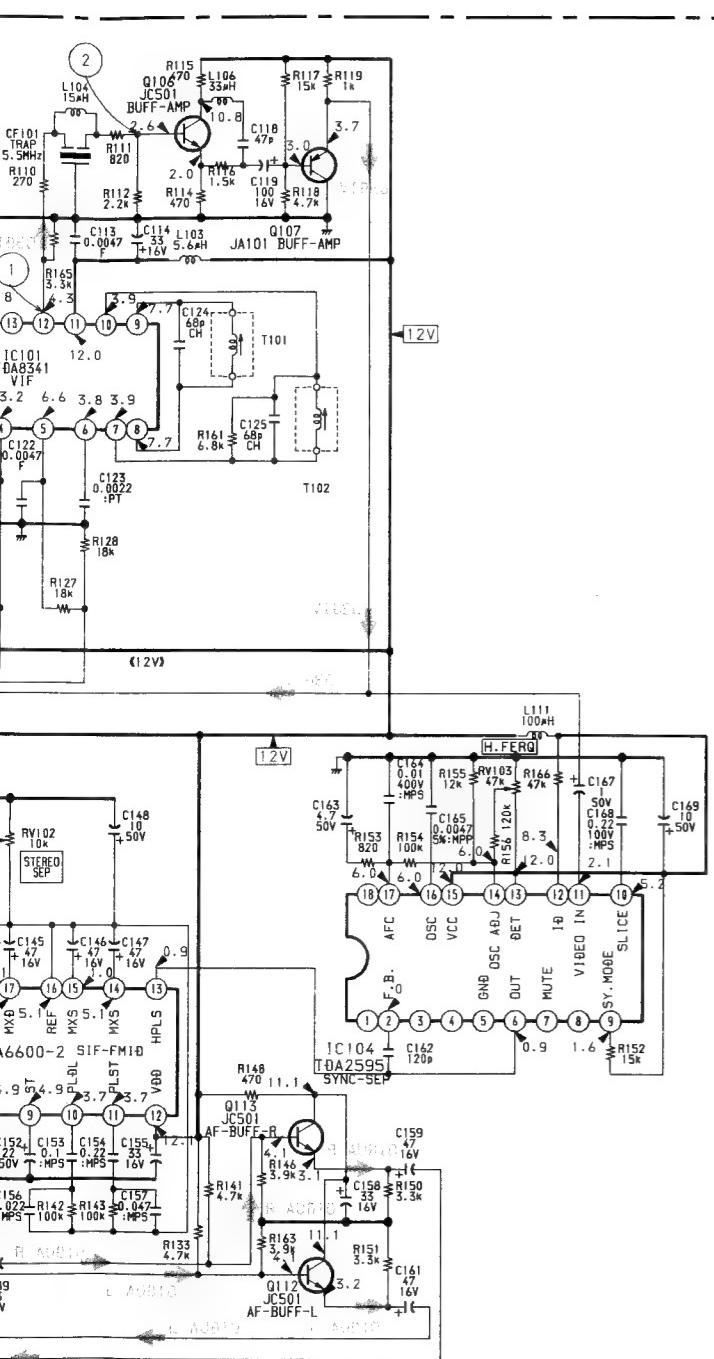
27

28

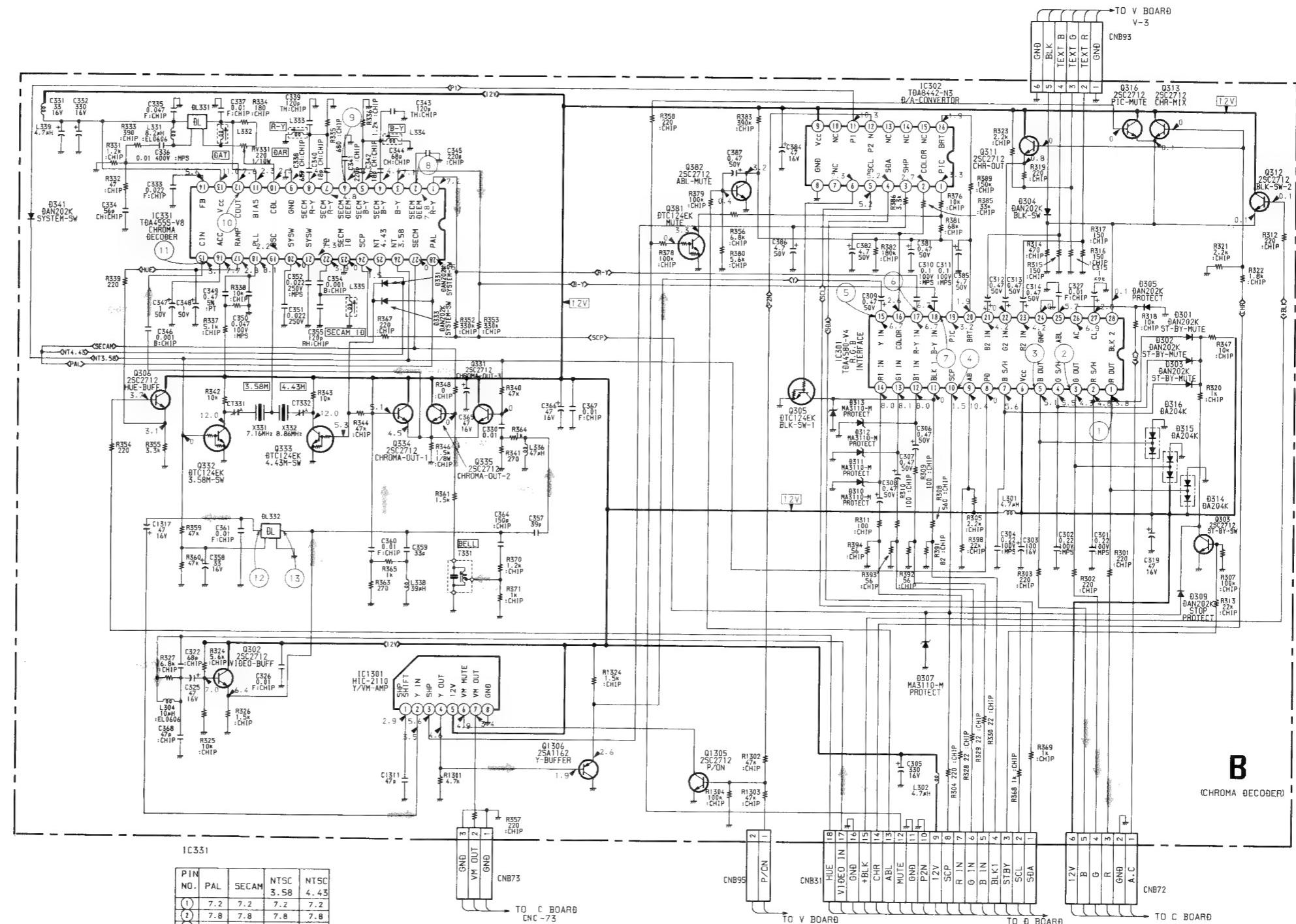
20

30

21

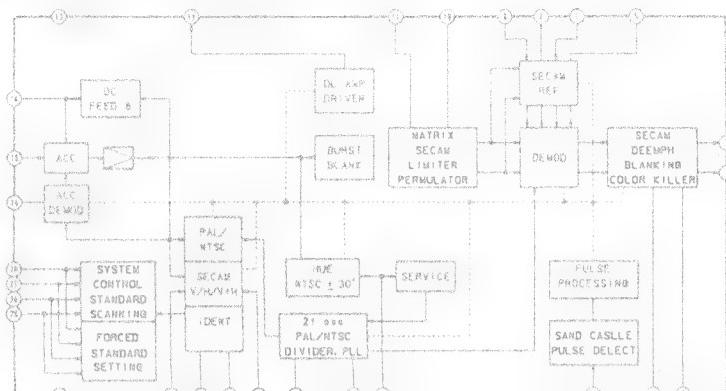


A
(SIGNAL.TUNER
BAND SW)

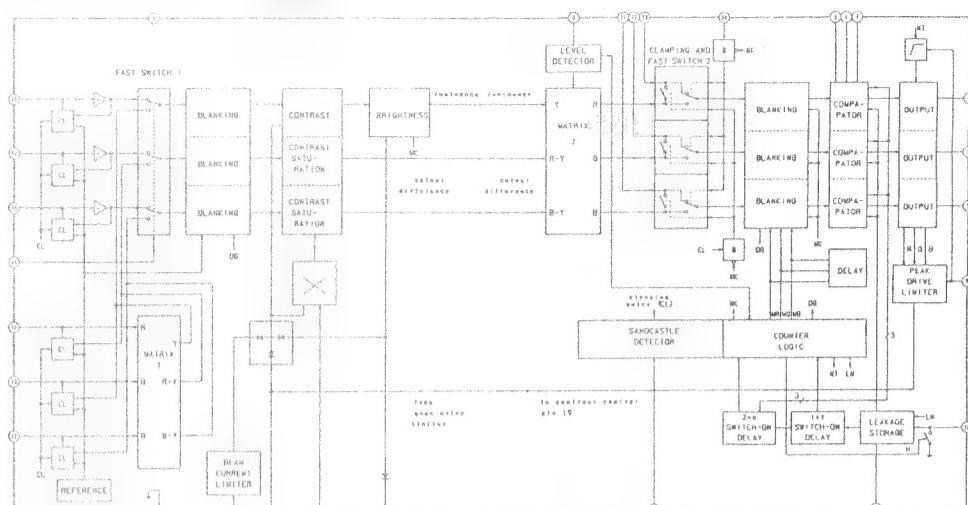


PIN NO.	PAL	SECAM	NTSC 3.58	NTSC 4.43
(1)	7.2	7.2	7.2	7.2
(2)	7.8	7.8	7.8	7.8
(3)	7.1	7.1	7.1	7.1
(4)	4.4	4.4	4.4	4.4
(5)	5.0	4.0	5.8	5.5
(6)	7.8	7.8	7.8	7.8
(7)	4.8	3.6	5.6	5.2
(8)	4.4	4.4	4.4	4.4
(9)	0	0	0	0
(10)	2.3	2.3	2.3	2.3
(11)	2.5	2.5	2.5	2.5
(12)	7.6	7.6	7.6	7.6
(13)	12.0	12.0	12.0	12.0
(14)	5.6	5.6	5.6	5.6
(15)	3.1	3.1	3.1	3.1
(16)	7.7	7.7	7.7	7.7
(17)	2.8	2.8	2.8	2.8
(18)	7.4	7.4	7.4	7.4
(19)	2.2	2.2	2.2	2.2
(20)	0	0	0	0
(21)	7.3	7.3	7.3	7.3
(22)	3.9	5.9	3.9	3.9
(23)	0	0	0	0
(24)	1.5	1.5	1.5	1.5
(25)	0	0	0	5.5
(26)	0	0	5.5	0
(27)	0	5.5	0	0
(28)	5.5	0	0	0

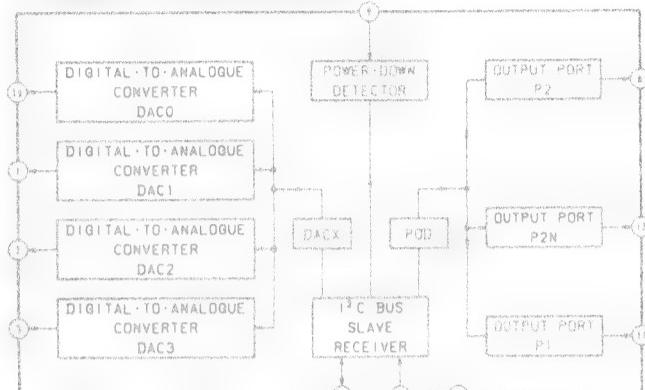
B BOARD IC331 TDA4555



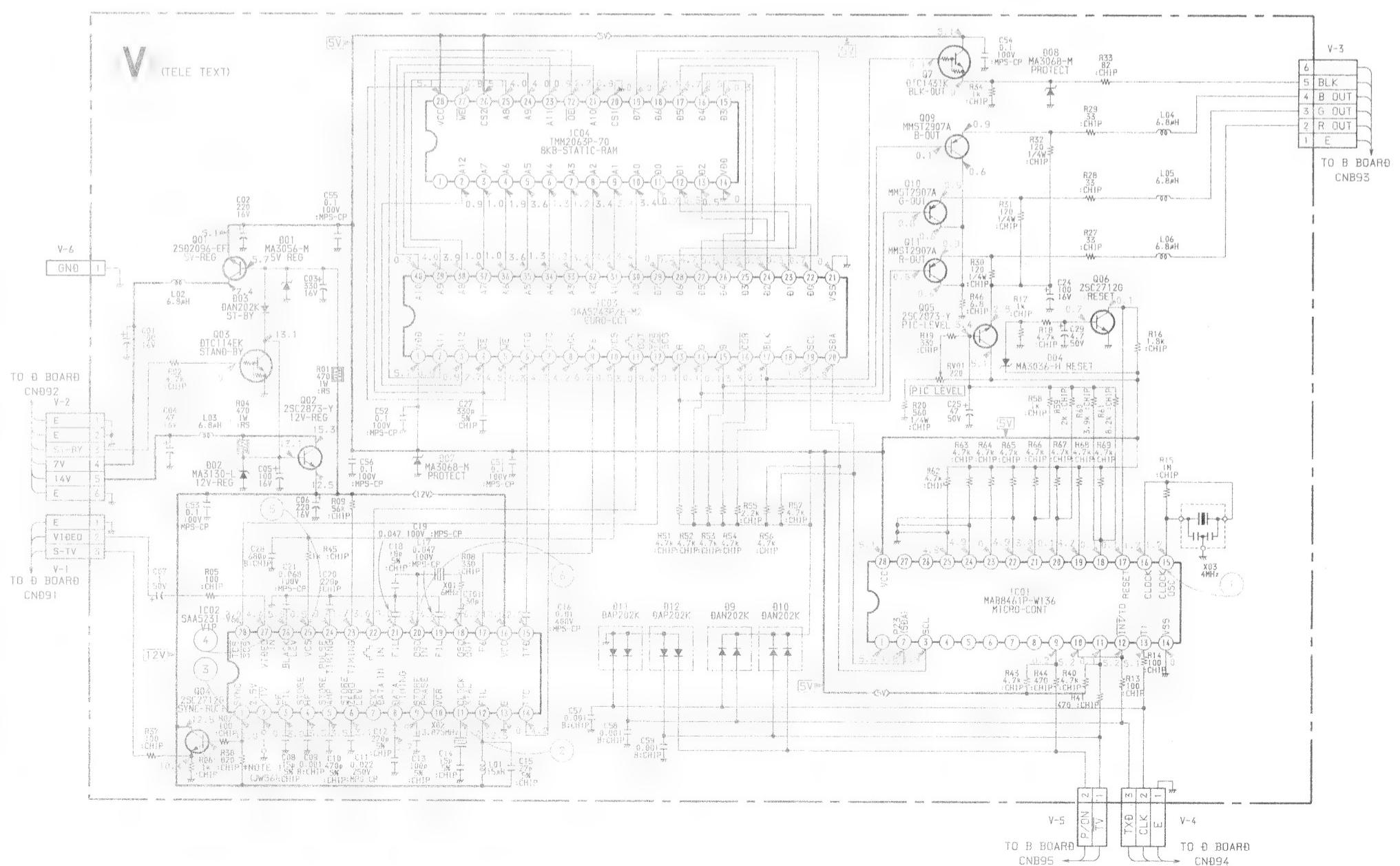
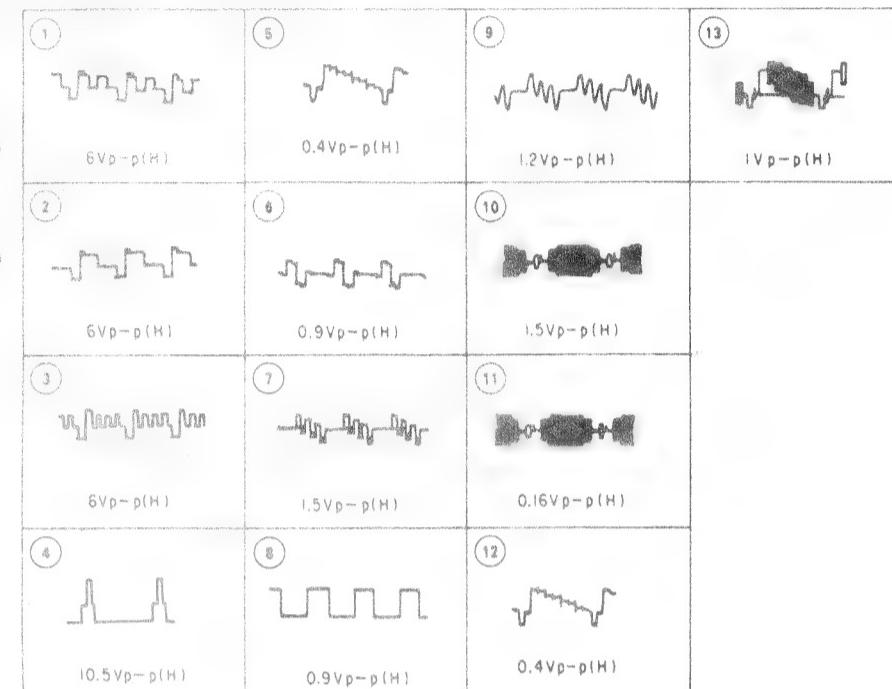
B BOARD IC301 TDA4580



B BOARD IC302 TDA8442

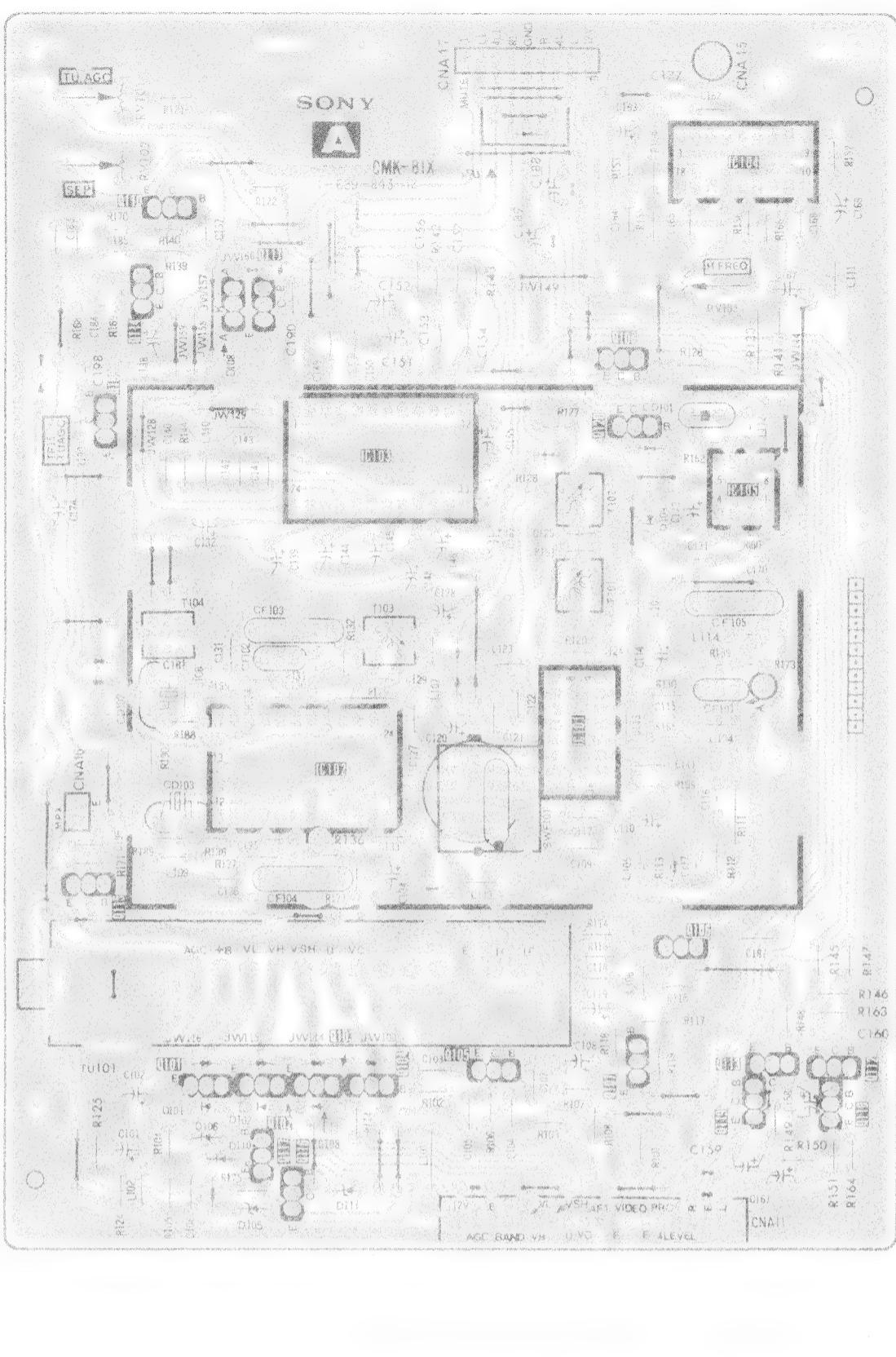


B BOARD WAVEFORM

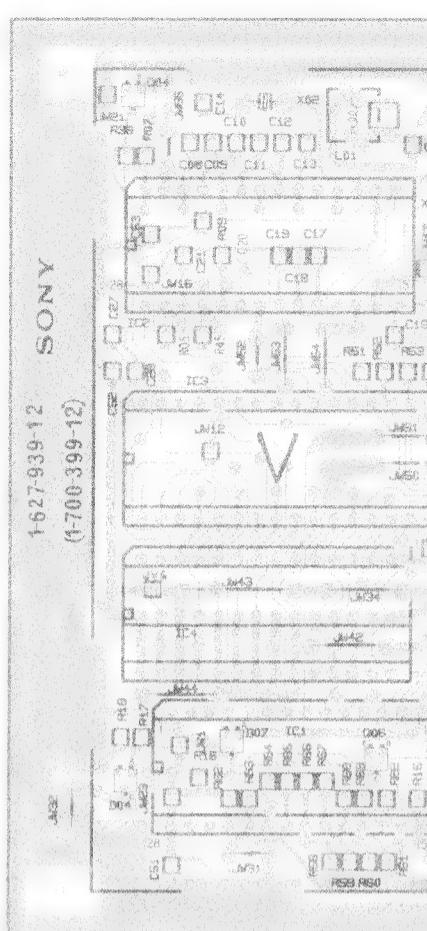


A SIGNAL TUNER,
BAND SW, VIF, SIF**B** R.G.B INTERFACE,
D/A CONVERTER,
CHROMA DECODER**F1** [POWER]**F2** [POWER SW]**V** [TELETEXT]

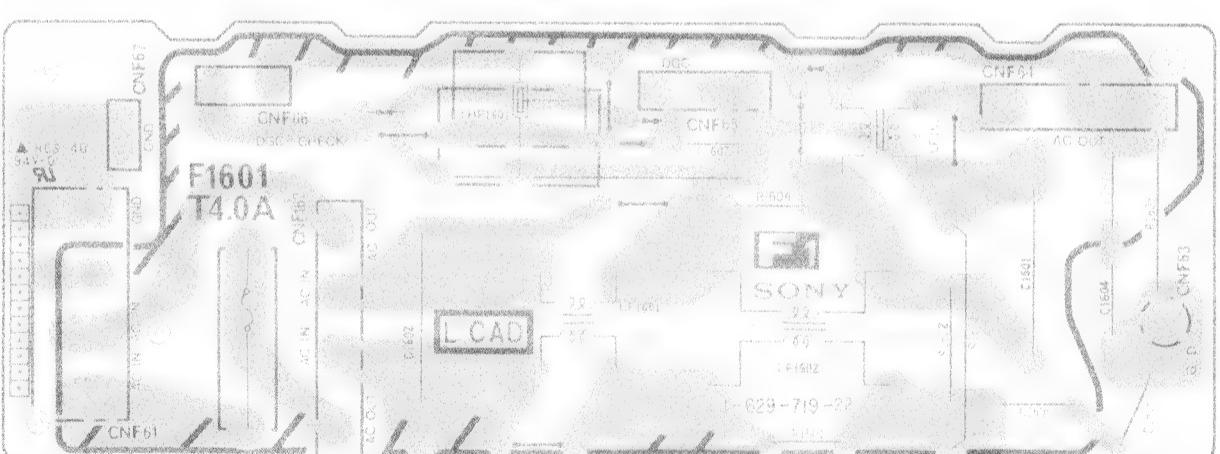
— A Board —



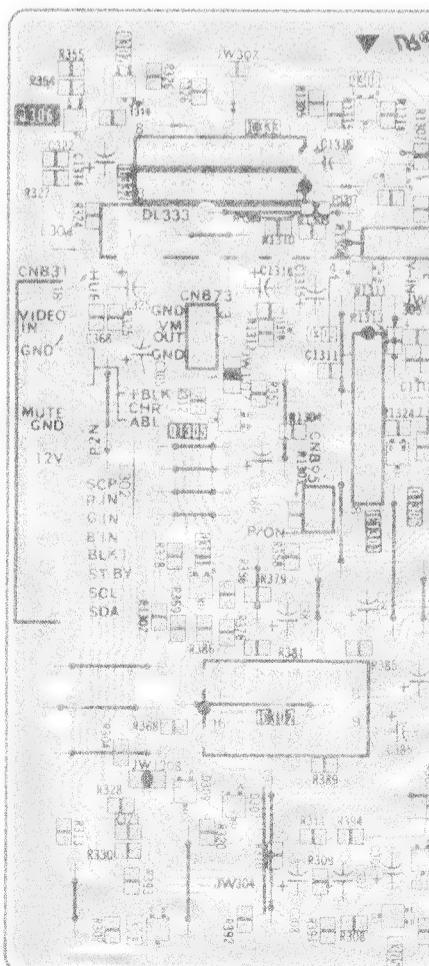
— V Board —



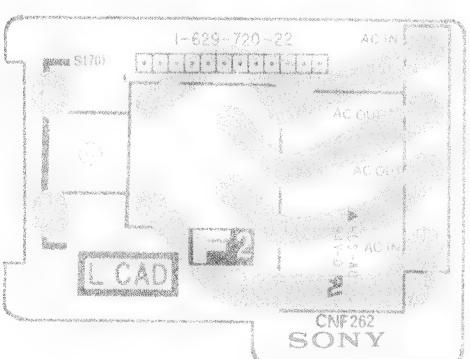
— F1 Board —



— B Board —



— F2 Board —



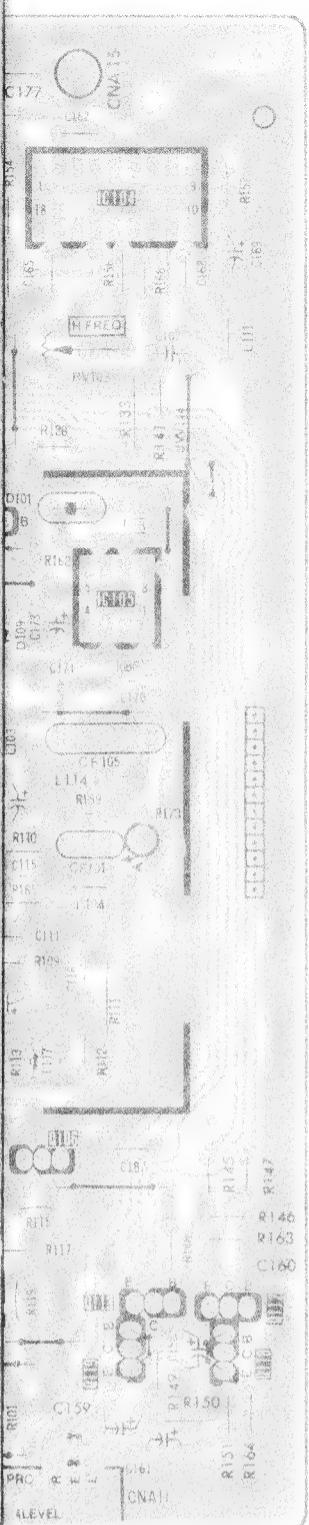
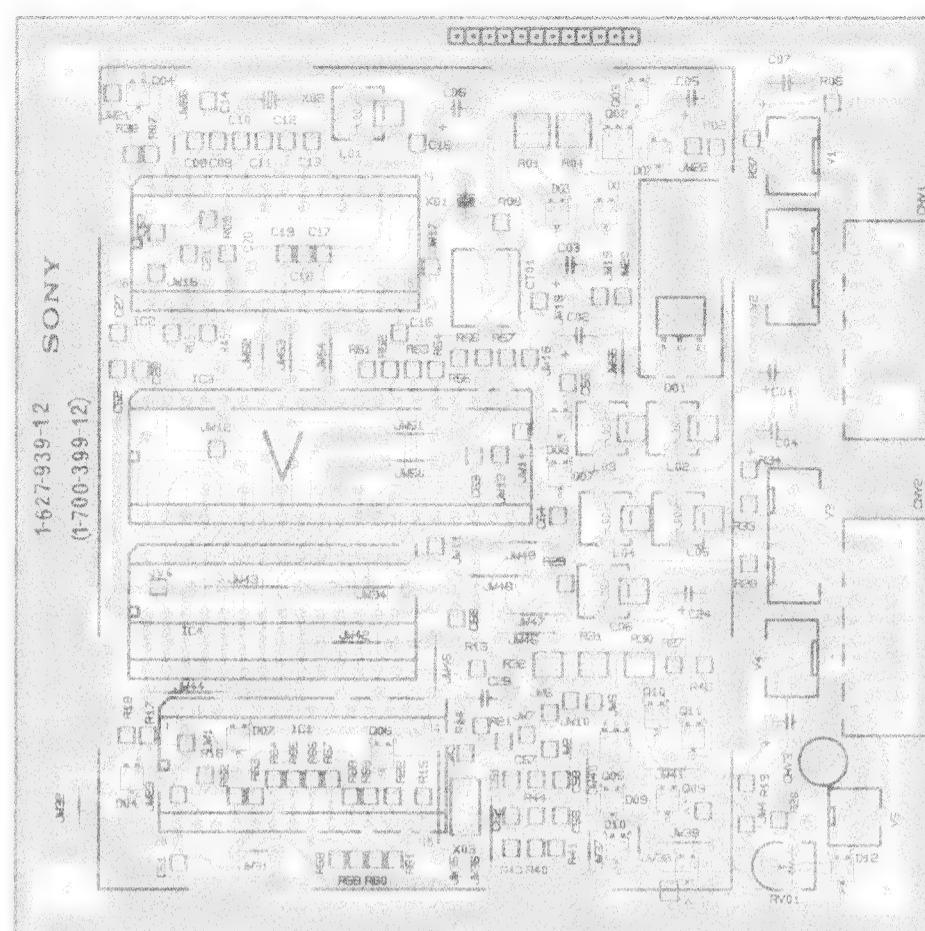
ERFACE,
ERTER,
DECODER

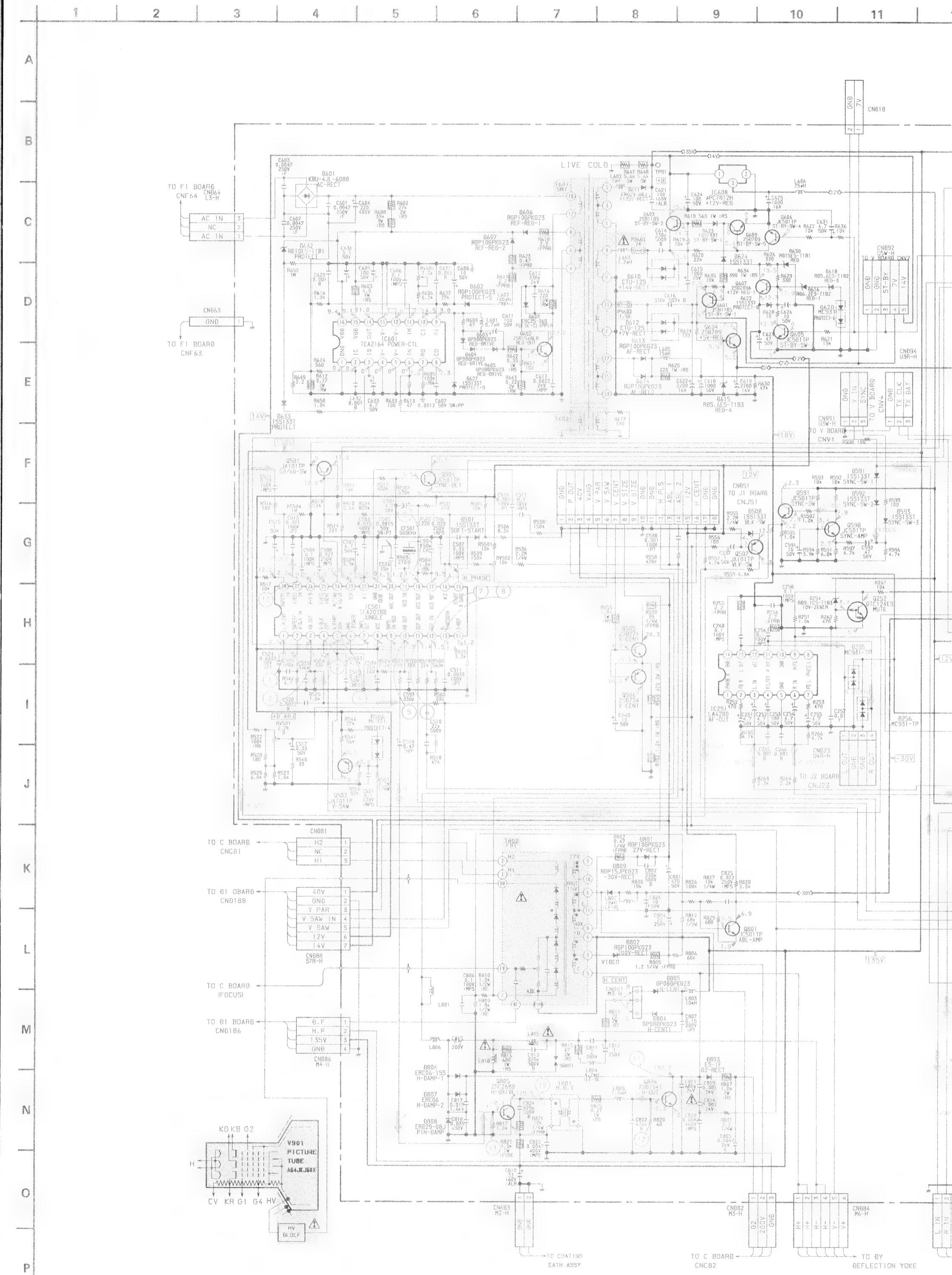
F1 [POWER]

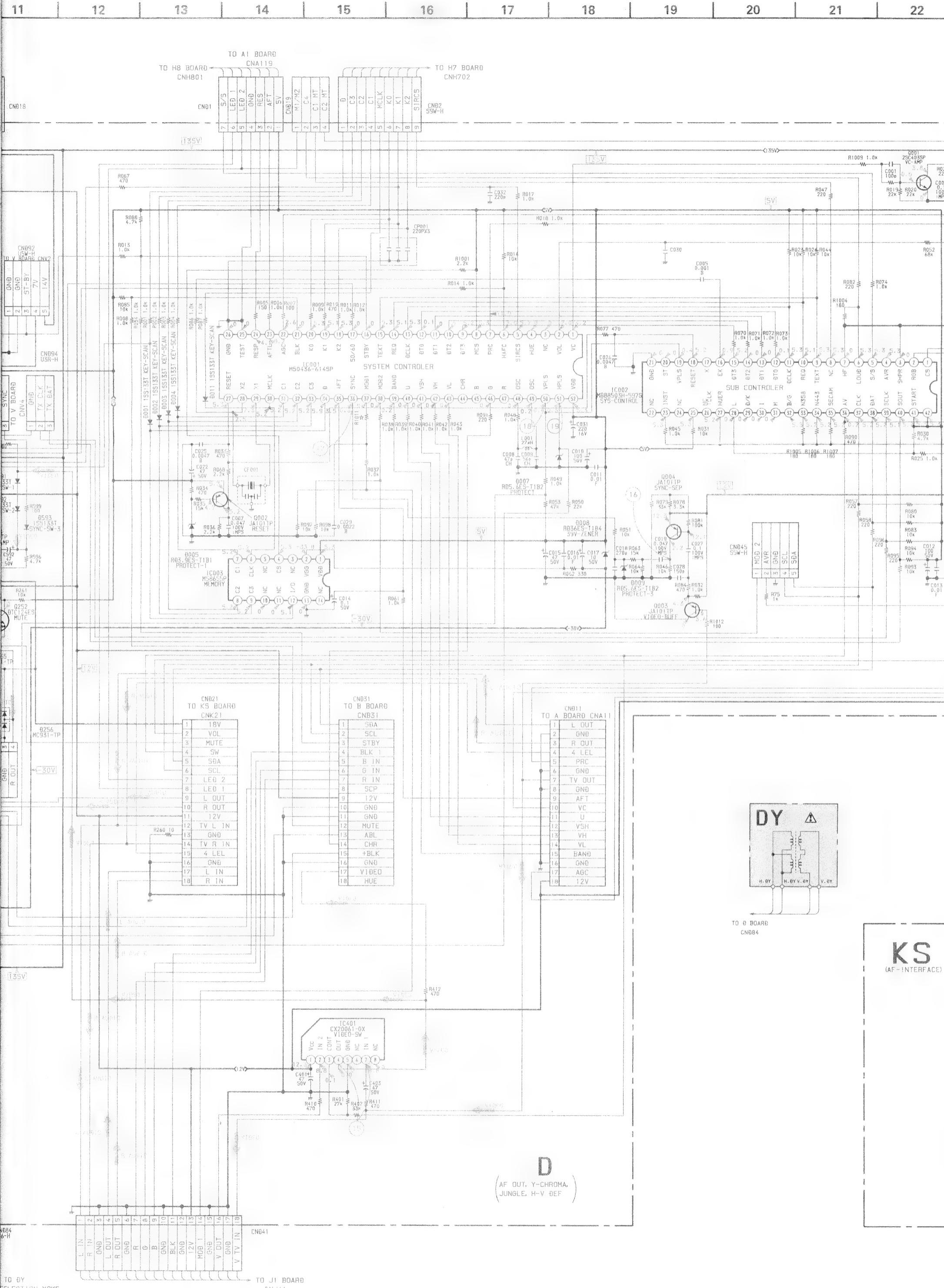
F2 [POWER SW]

V [TELETEXT]

- V Board -







17 18 19 20 21 22 23 24 25 26

A

B

C

D

E

F

G

H

I

J

K

L

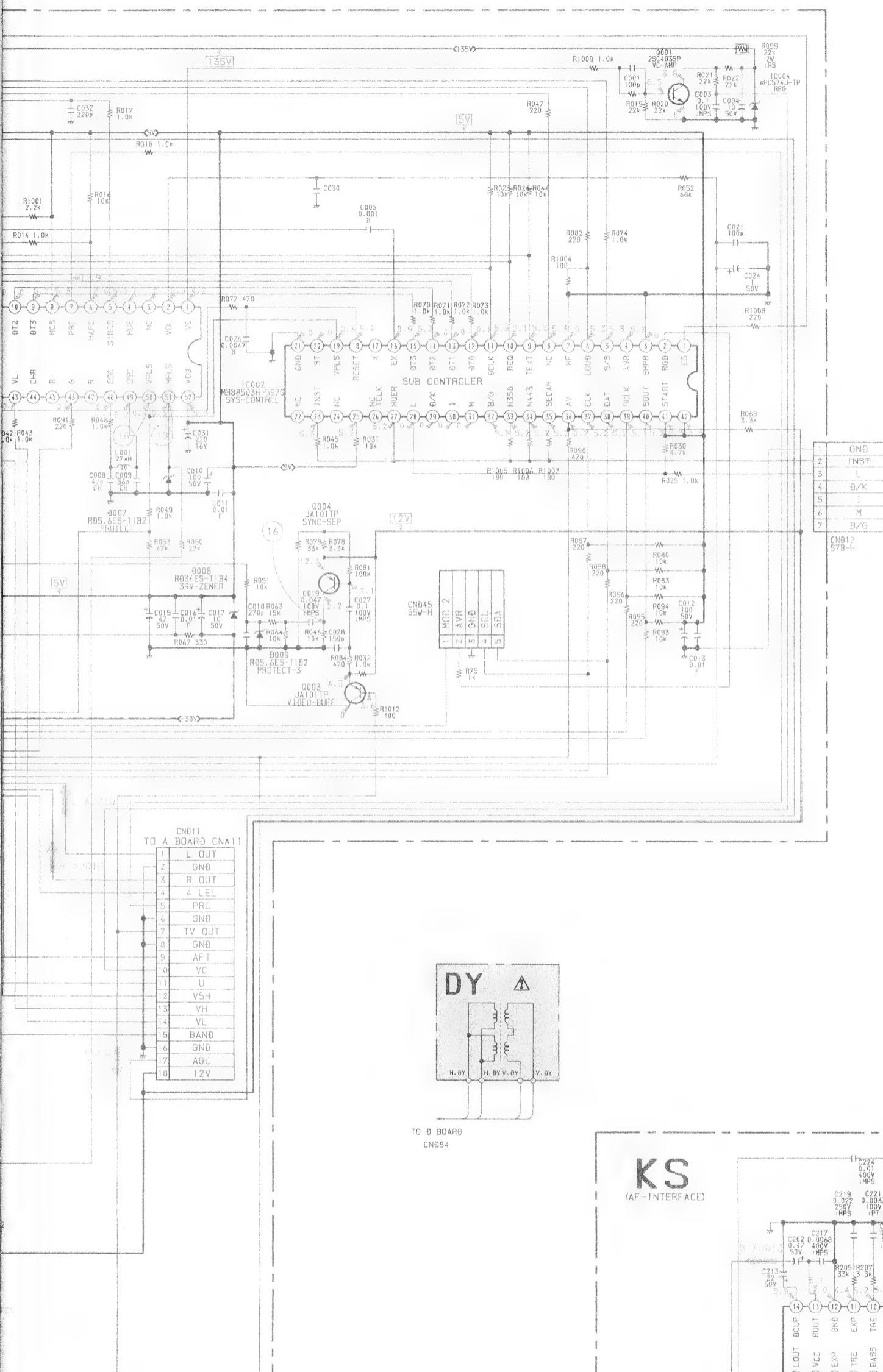
M

N

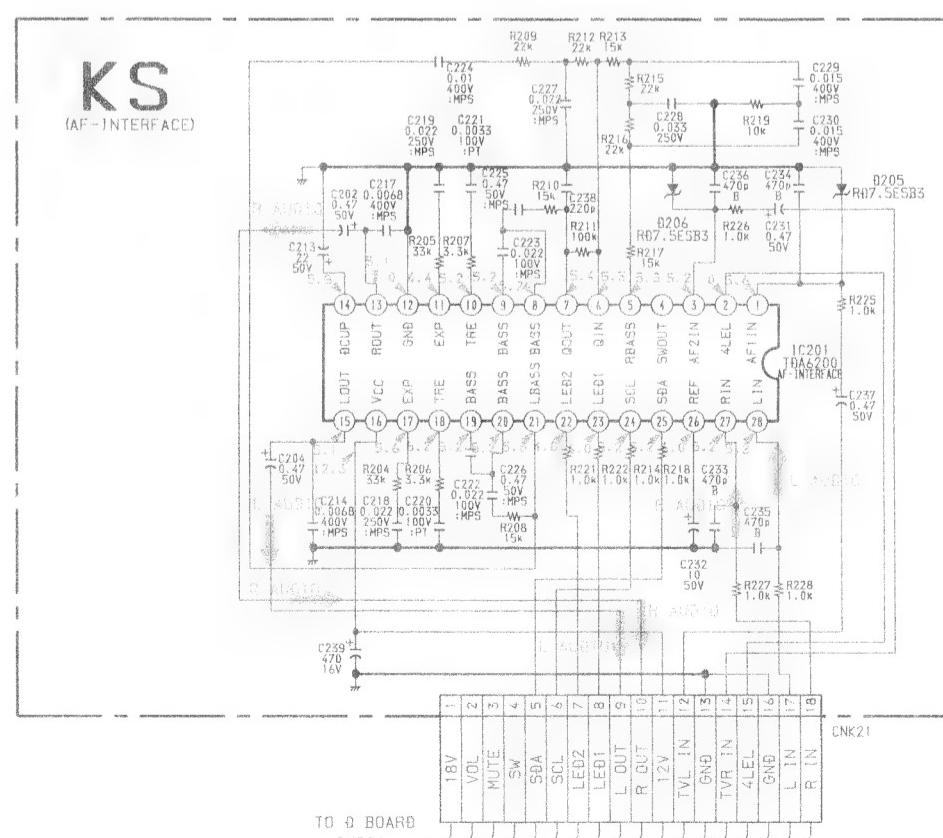
O

P

D H7 BOARD
CNH702



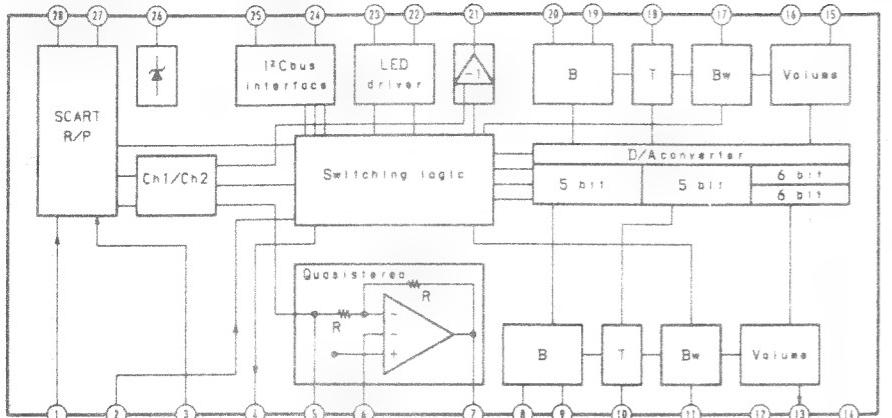
D
(AF OUT, Y-CHROMA,
JUNGLE, H-V DEF)



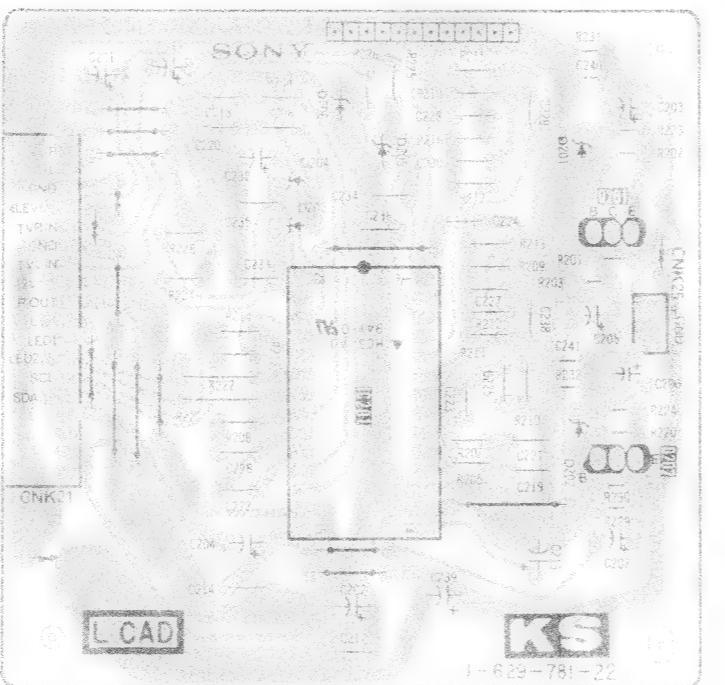
Ks [STEREO]

D SYSTEM CONTROL
MEMORY, POWER CTL
JUNGLE, H-V OUT

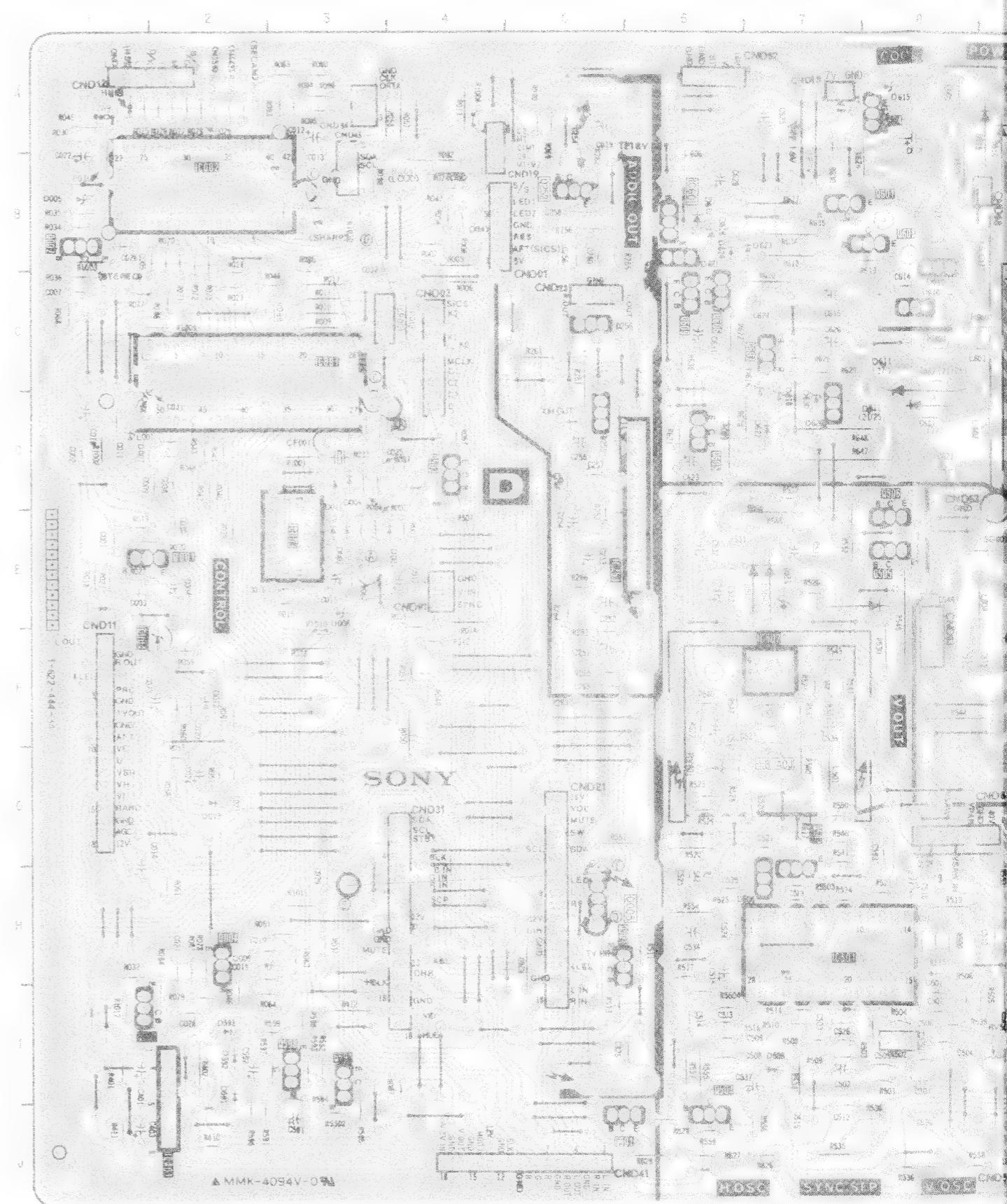
KS BOARD IC201 TDA6200



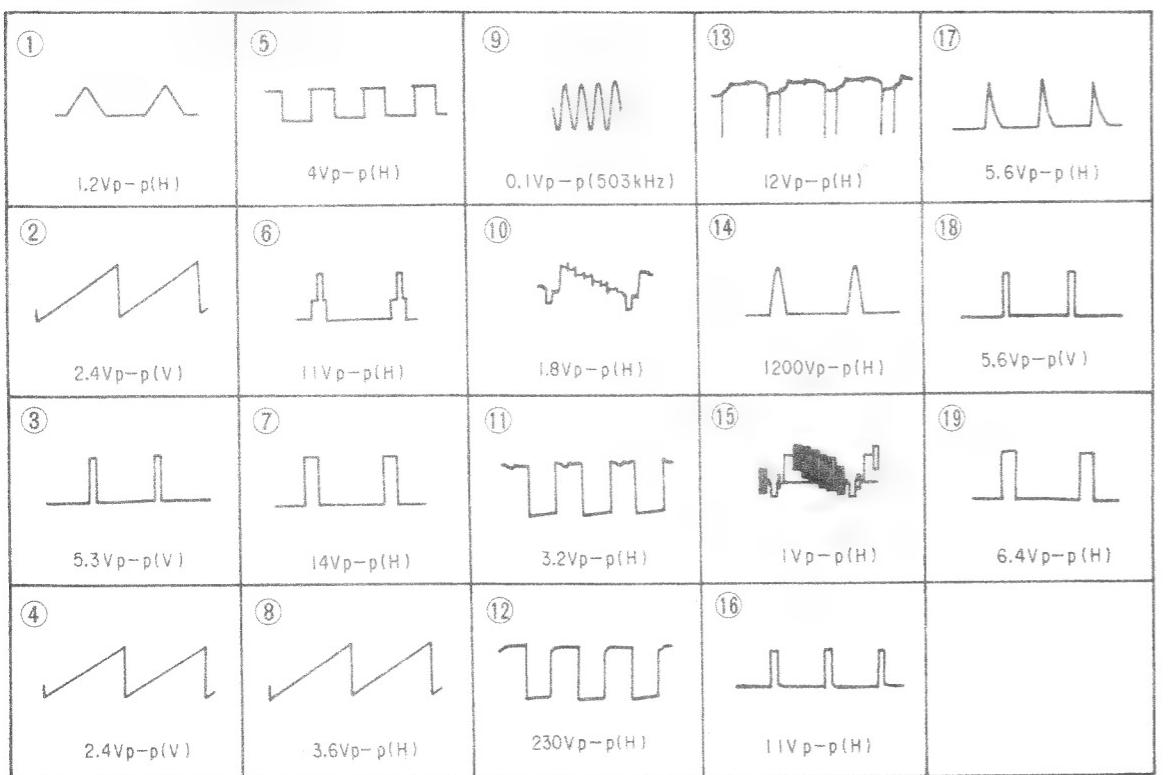
- KS Board -

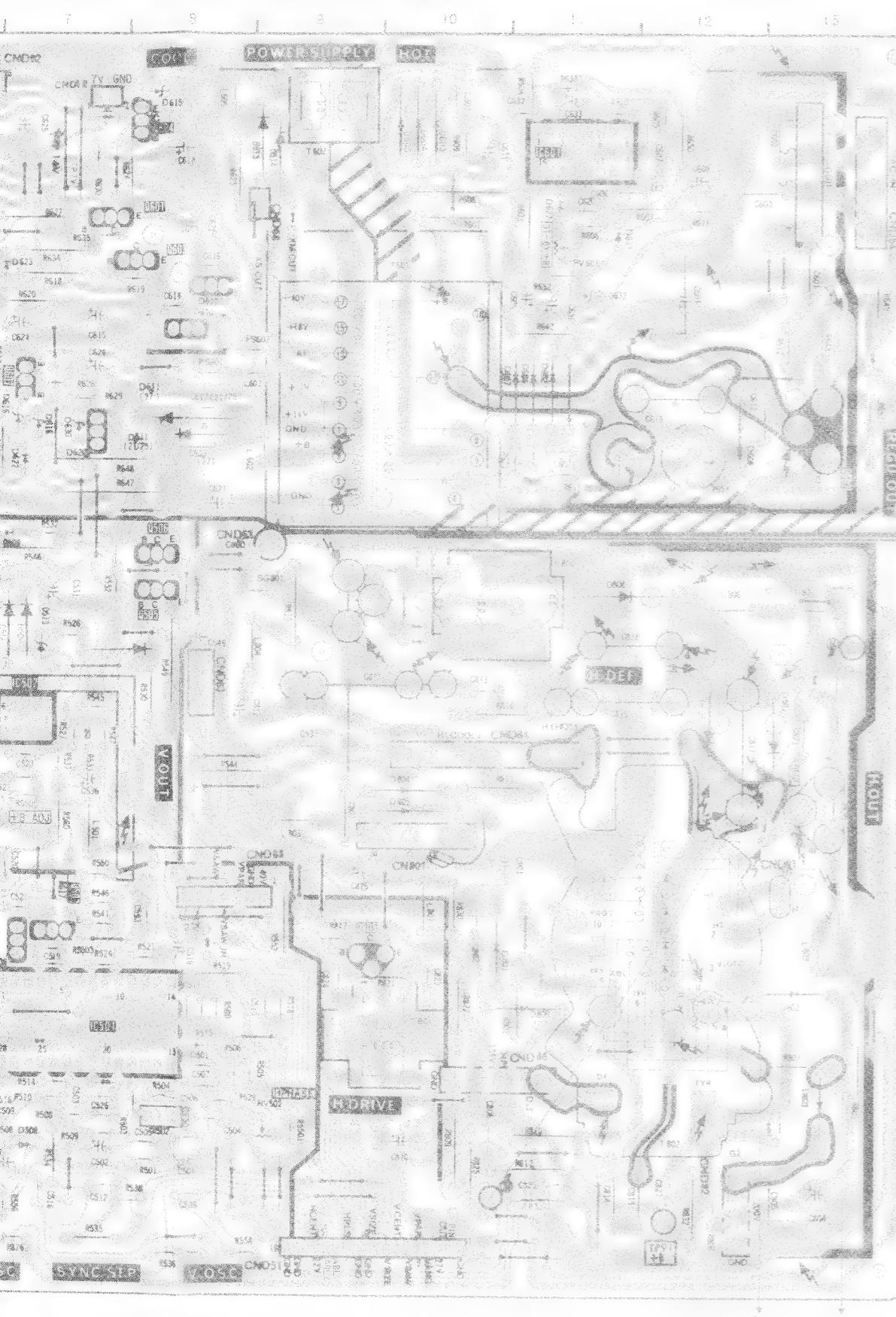


- D Board -



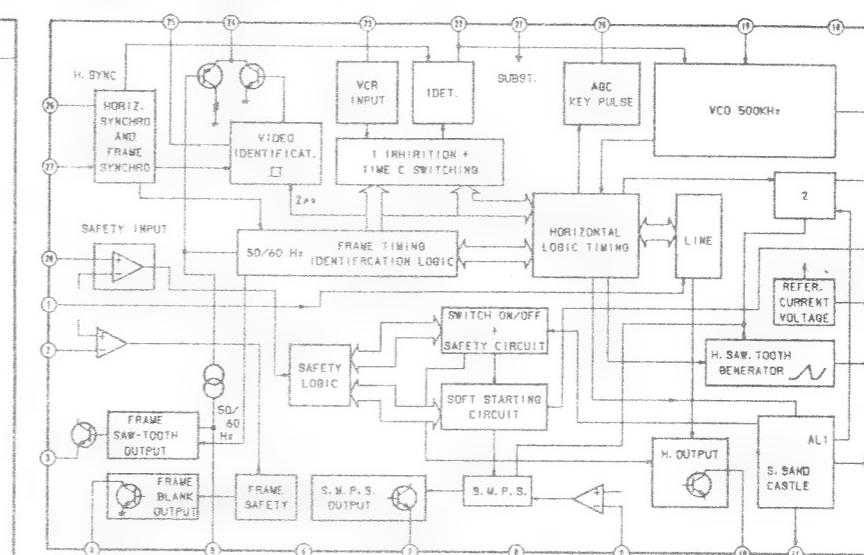
● D BOARD WAVEFORM



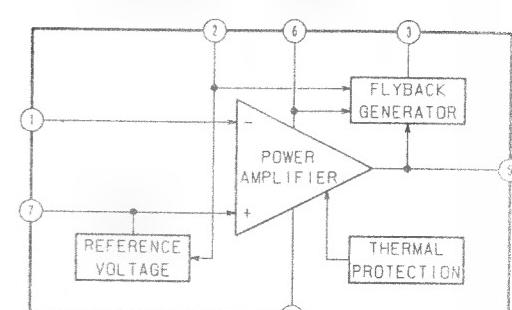


IC		DIODE	
IC001	D-3	D001	E-4
IC002	B-2	D002	E-3
IC003	E-3	D003	E-3
IC004	F-2	D004	D-3
IC251	E-6	D005	B-1
IC401	J-2	D007	D-1
IC501	H-7	D008	F-3
IC502	F-7	D009	I-3
IC601	B-11	D011	E-3
		D012	F-2
		D013	G-2
TRANSISTOR			
Q001	E-2	D254	B-5
Q002	B-1	D501	I-8
Q003	I-2	D504	E-7
Q004	H-2	D506	H-7
Q252	B-6	D508	I-7
Q501	H-6	D511	F-8
Q502	H-7	D512	E-7
Q503	D-4	D513	E-7
Q505	E-8	D591	J-2
Q506	E-8	D592	I-2
Q507	J-6	D593	I-2
Q591	I-3	D601	B-13
Q598	I-3	D602	C-11
Q601	B-8	D603	A-10
Q602	D-13	D604	A-10
Q603	B-8	D605	A-10
Q604	A-8	D606	C-11
Q605	D-6	D607	C-11
Q606	C-6	D608	D-11
Q607	C-7	D610	C-8
Q608	B-6	D611	D-8
Q609	C-6	D612	C-8
Q801	J-6	D613	A-9
Q804	G-13	D614	B-9
Q805	H-10	D615	A-8
		D616	D-7
		D617	B-6
		D618	D-7
		D619	B-6
		D620	D-8
		D621	C-6
		D622	D-7
		D623	C-7
		D624	C-7
		D627	B-11
		D630	D-7
		D632	C-11
		D633	C-11
		D801	H-11
		D802	H-13
		D803	I-13
		D804	G-10
		D805	G-10
		D806	F-12
		D808	E-12
		D809	H-11
VARIABLE RESISTOR			
RV501	G-6		
RV502	I-9		
RV601	B-11		

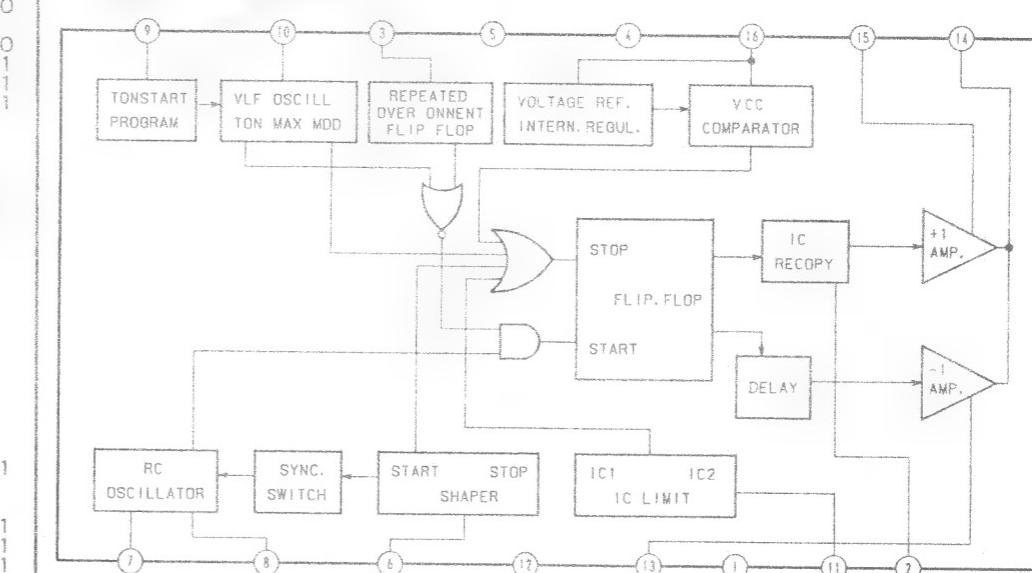
D BOARD IC501 TEA2028A



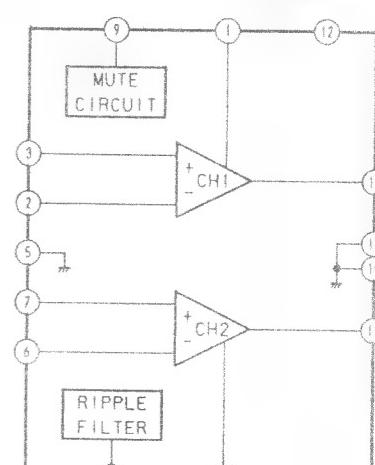
D BOARD IC502 TDA8170



D BOARD IC601 TFA2164

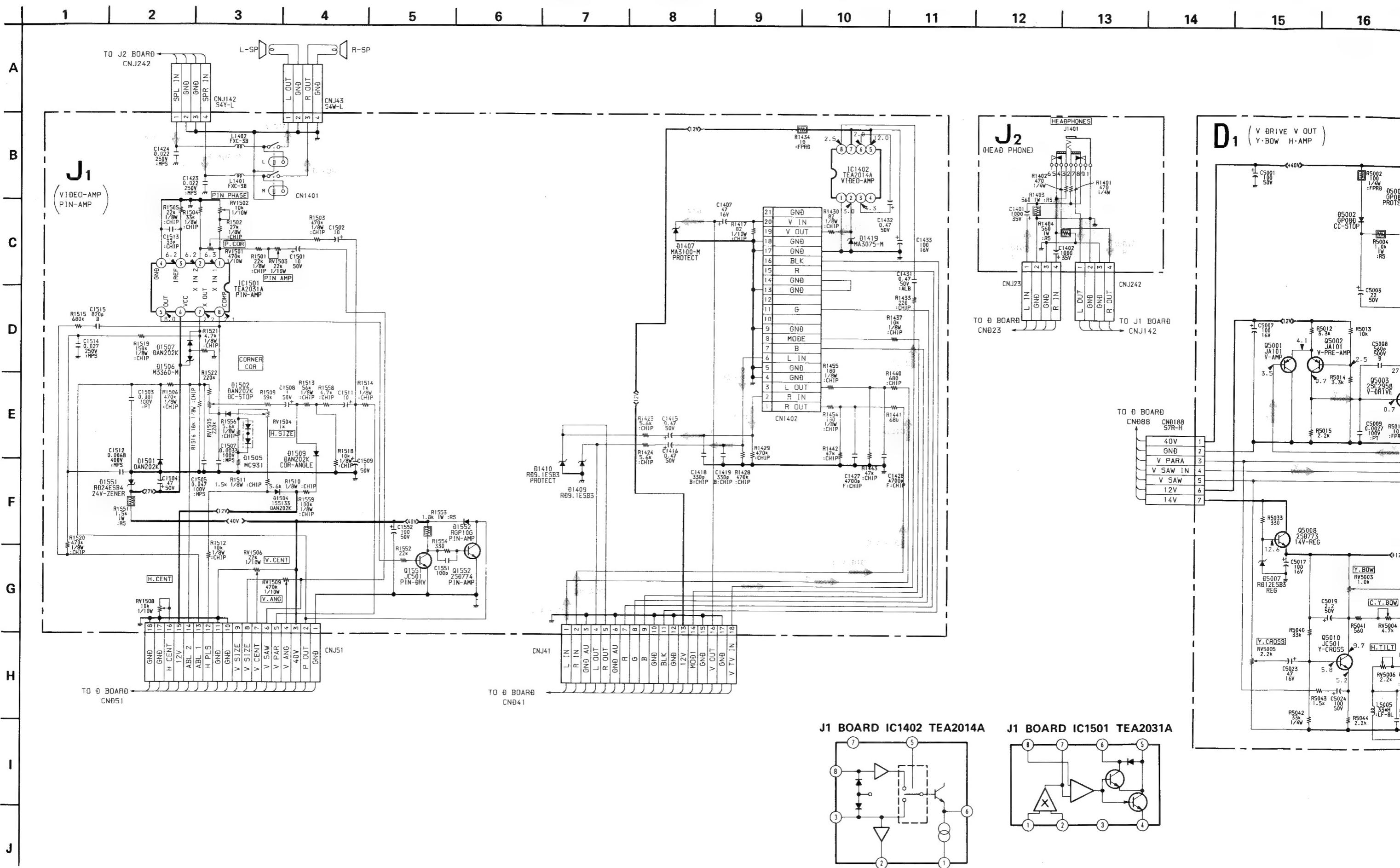


D BOARD IC251 | A4280

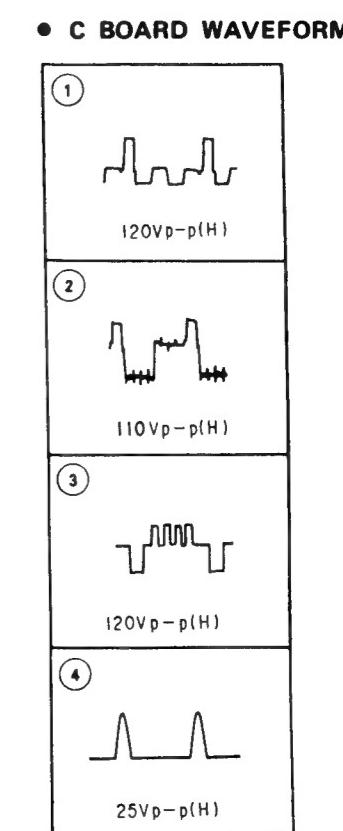
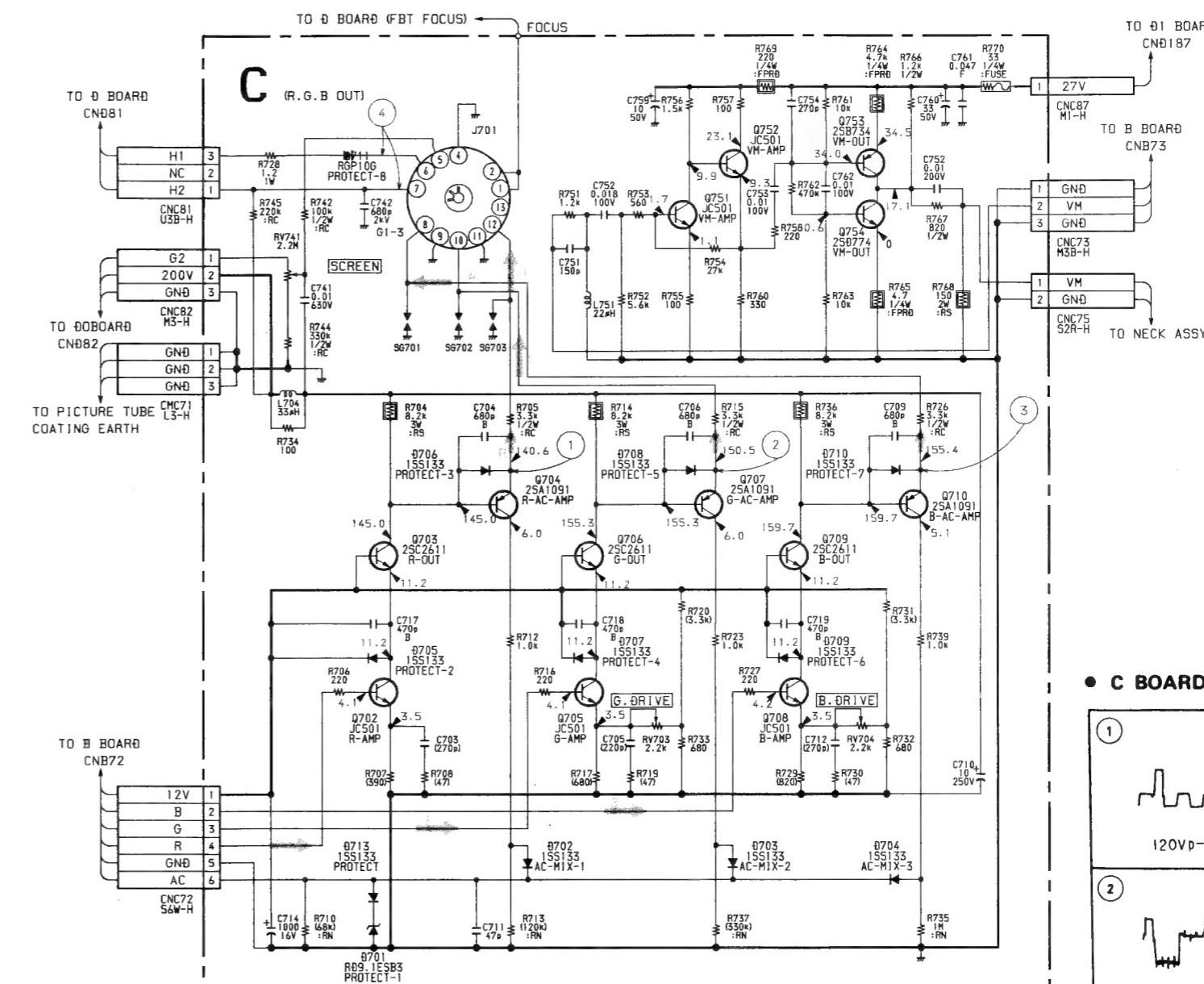
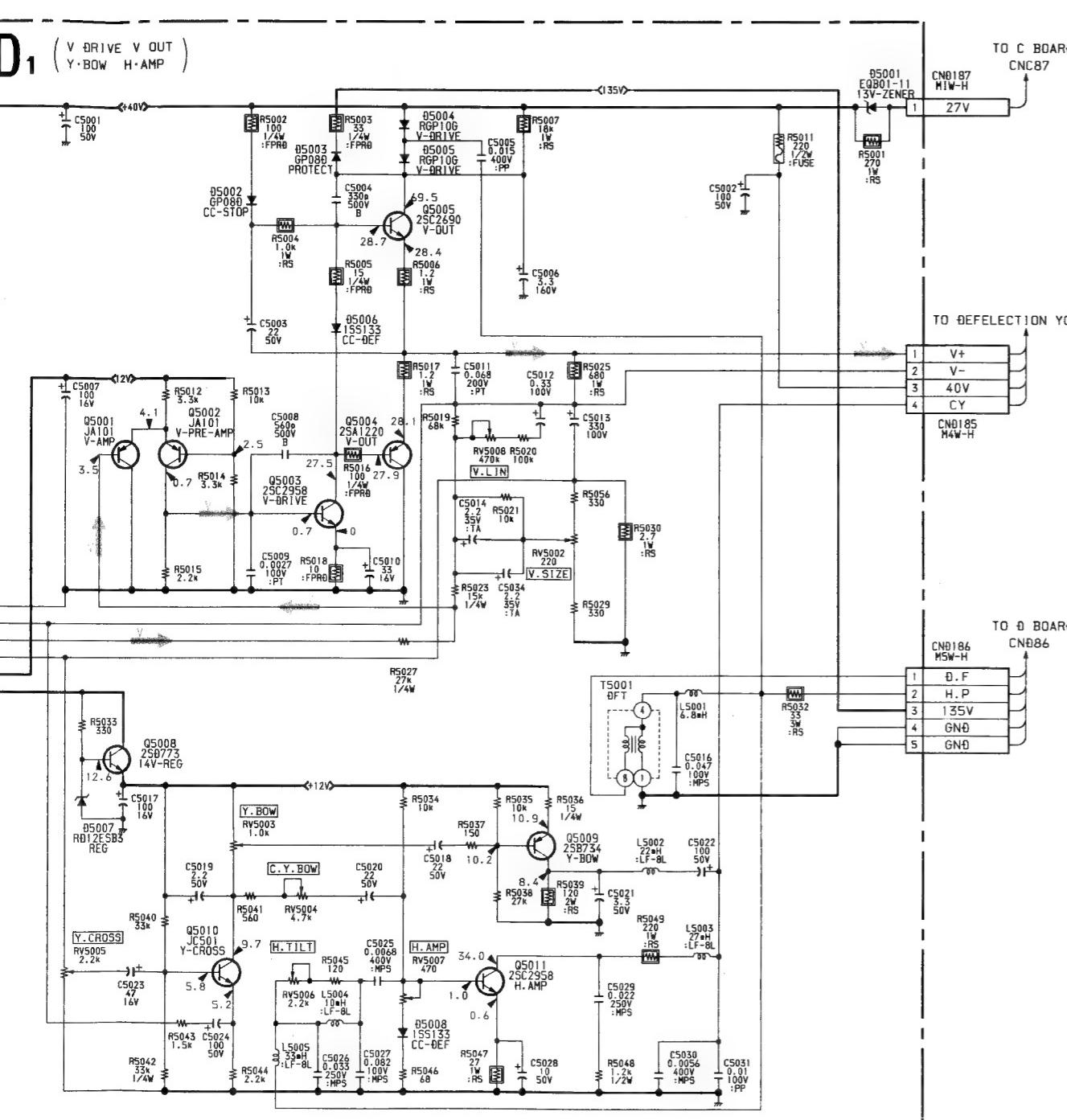


NOTE

NOTE: The circuit indicated as left contains high voltage of over 600 V_{p-p}. Care must be paid to prevent an electric shock in inspection or repairing.



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



1 | 2 | 3 | 4 | 5 | 6 | 7 |

A

B

C

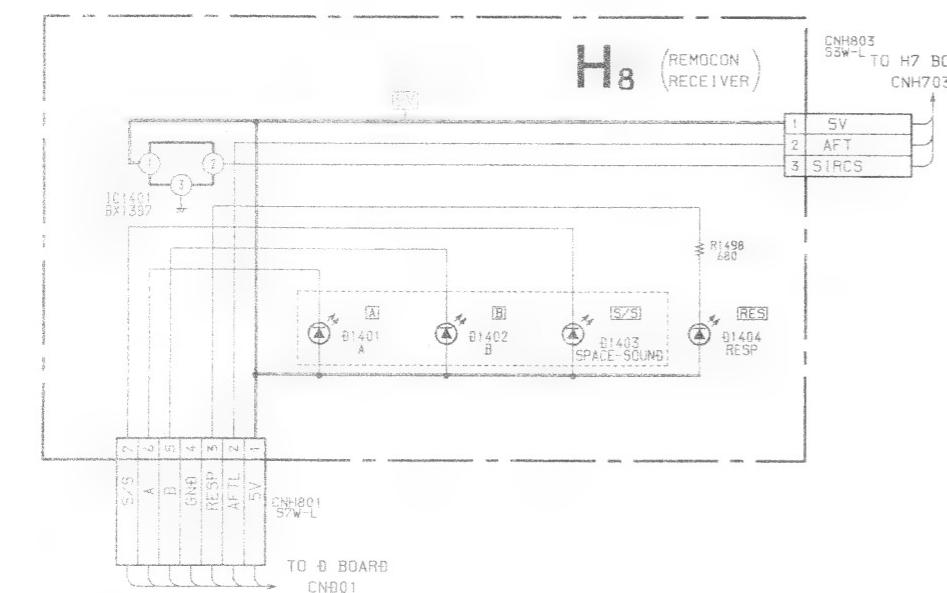
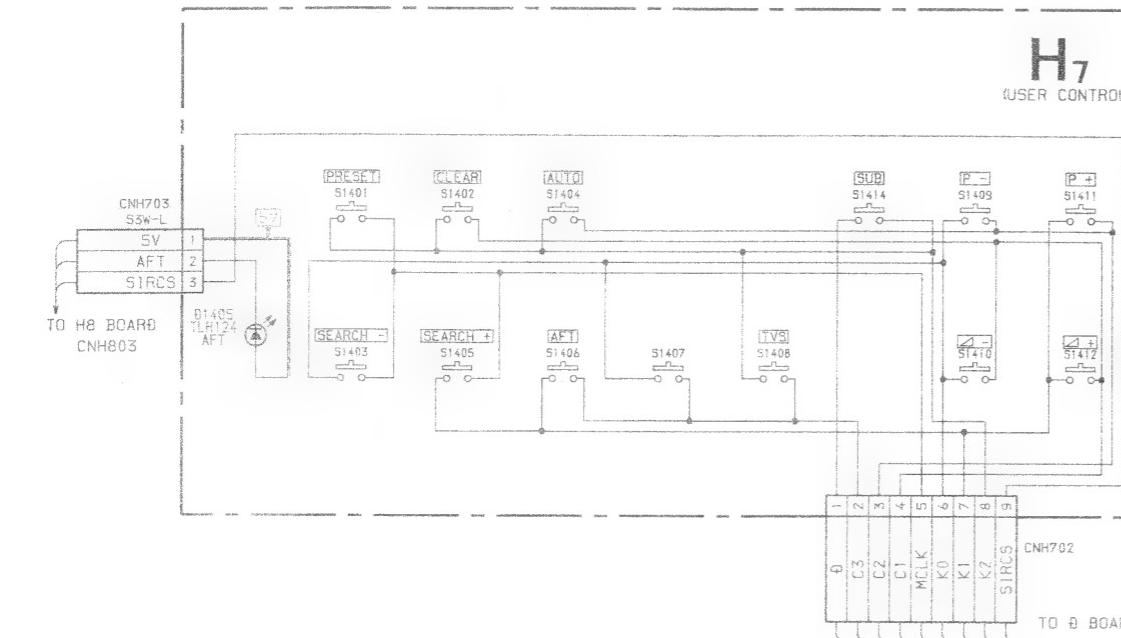
D

E

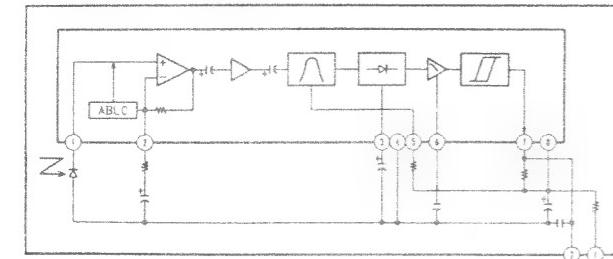
F

G

H



H4 BOARD IC1401 BX-1387

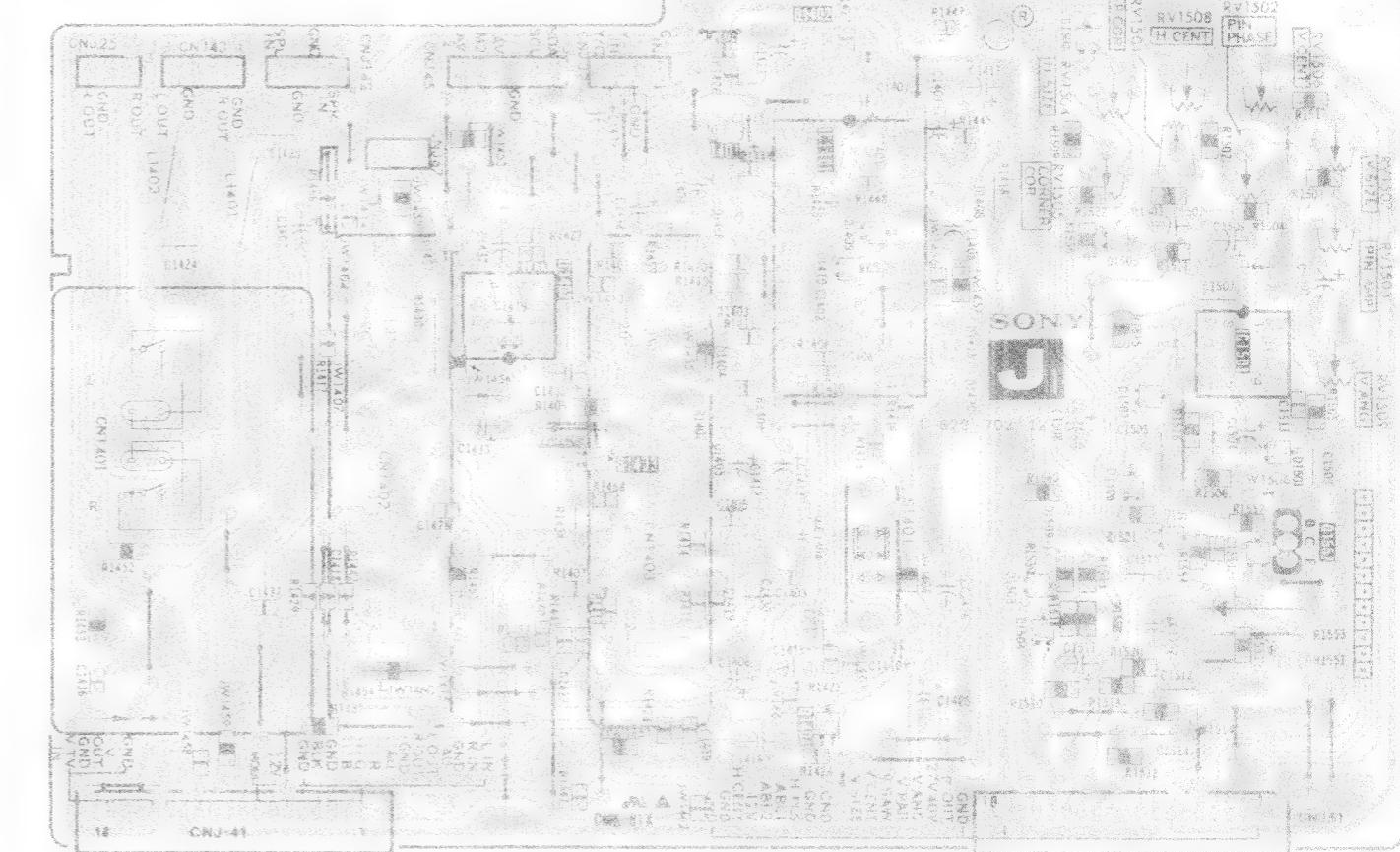
**J1**VIDEO AMP
PIN AMP**J2**

HEADPHONE JACK

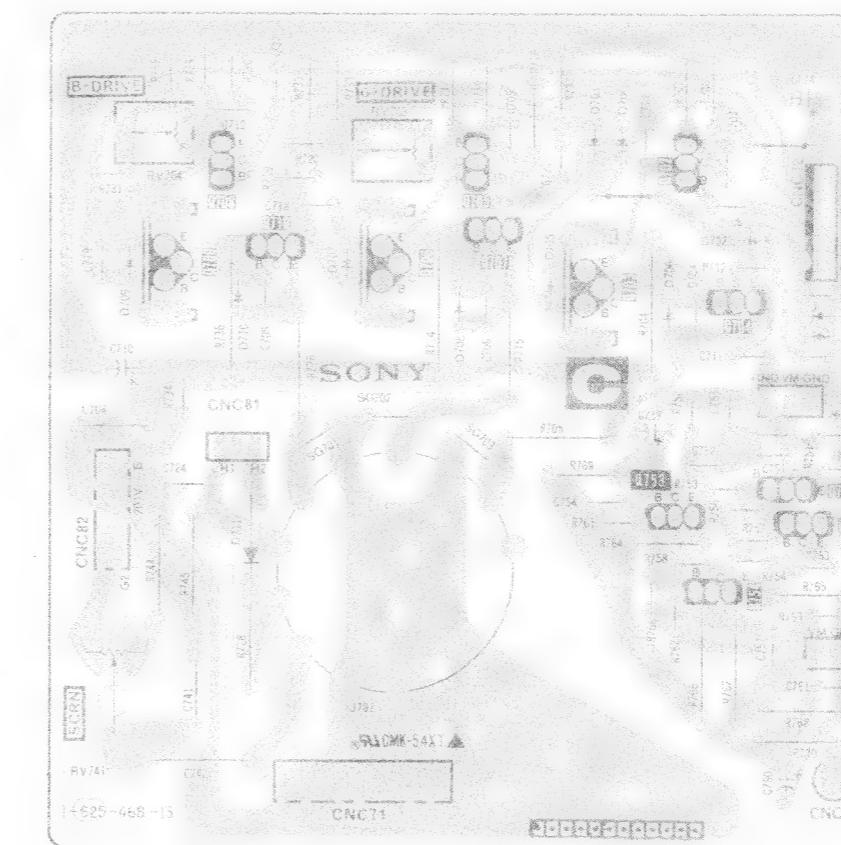
C

[R-G-B OUT]

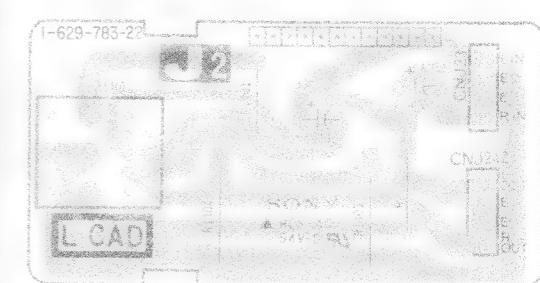
— J1 Board —



— C Board —



— J2 Board —



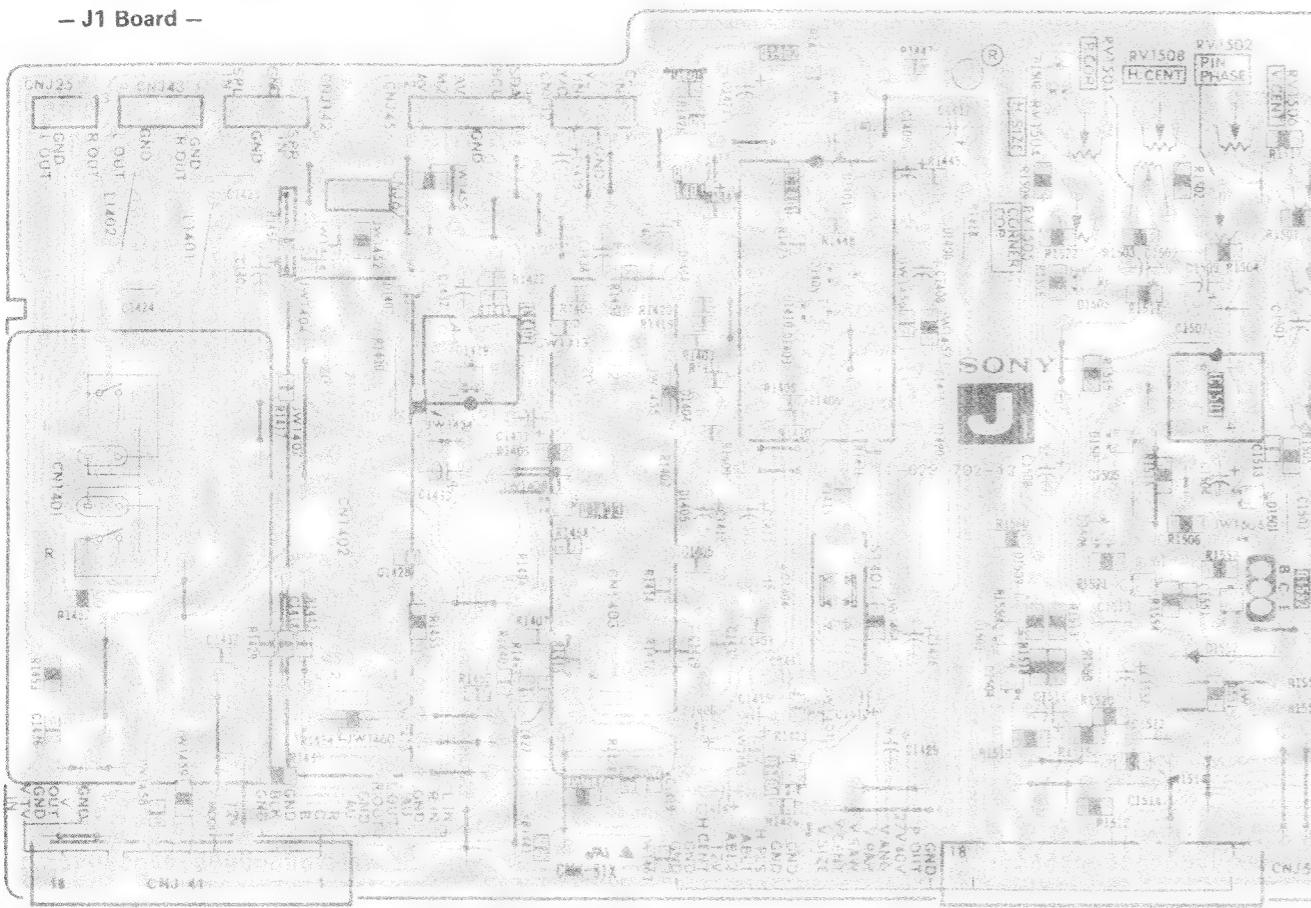
7

J1 [VIDEO AMP]
PIN AMP

J2 HEADPHONE JA

C R.G.B C

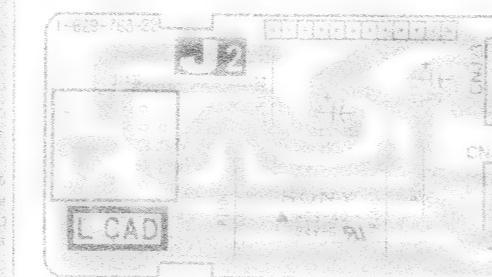
- J1 Board -



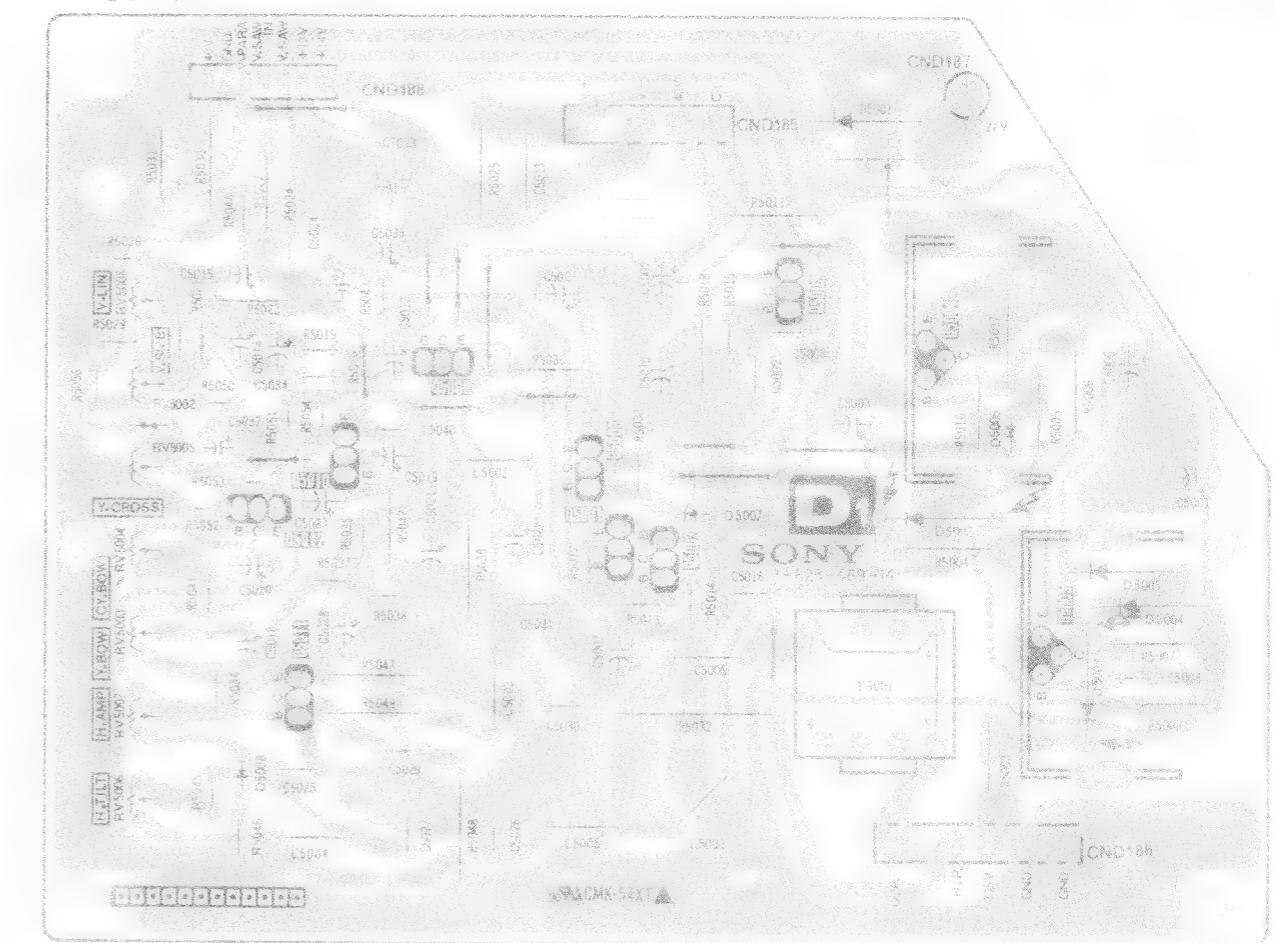
-C Board-



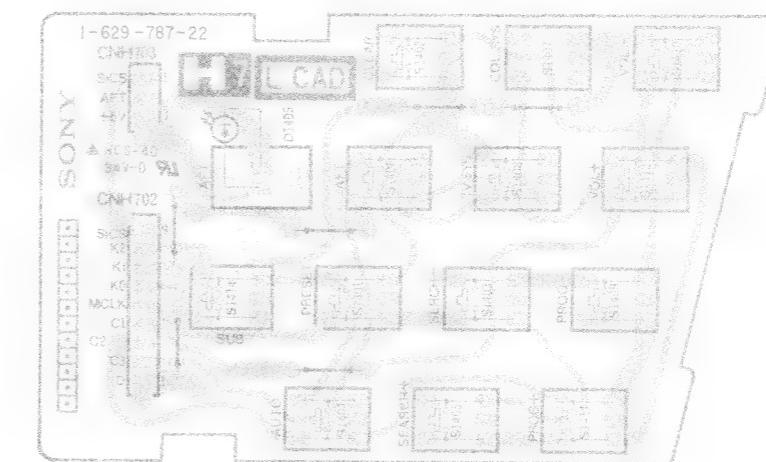
- J2 B



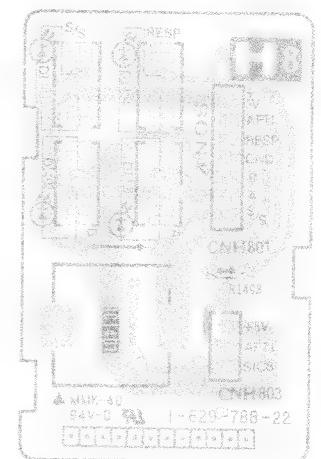
-D1 Board



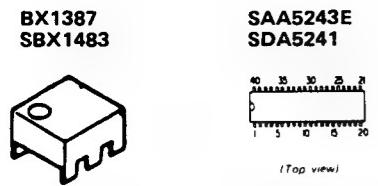
-H7 Board



- H8 Board -



5-5. SEMICONDUCTORS



DTA114ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SA1048
2SA1175
2SC403SP
2SC1740SRT
2SC2458
2SC2603
2SC2710

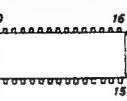
2SB740
2SC1475
2SD789

ERC06-15S
ERC25-06S
ERD29-08J

MC921



CXA1114P
MAB8461P
SAA5231-V6
TDA4555
TDA4580
TDA6200
TDA6600
TEA2028B
TMM2063D



TA8662N



TBA129
TEA2014A
TEA2031A



2SB1185
2SD1761

EQB01-11
ERC24-06S
ERD28-06S
ES1F
GP08DPKG23
RGP01-17PKG23
RGP10PKG23
RGP15PKG23
1SS168
1SS238
1S1555
10E2

MC921



28
15
14

(Top view)

CX20061

TDA2556
TDA2558

(Top view)

2SA933
2SA1091
JA101
JC501



2SC2216

HZS39NB4TD
RD3.6ES-B2
RD3.9ES-B1
RD4.7ES-B1
RD5.6ES-B2
RD6.2ES-B2
RD6.8ES-B2
RD7.5ES-B3
RD9.1ES-B3
RD10ES-B3
RD15ES-B1
RD36ES-B4
RD39ES-B4
1SS119
1SS120
1SS133

MC931



LA4280

TDA2595

(Top view)

2SA1175
2SC2785



2SD1548
2SD1941

U05G
V19E

SE303AY



M50436-614SP

(Top view)

TC4049BP
TC4053BP

TDA3541

TDA8341

TDA4510

TDA8442

TEA2126A

TEA2164

TOP VIEW

(Top view)

16151413121109
1 2 3 4 5 6 7 8

(Top view)

M58655P

(Top view)

2SA1220A
2SC2611
2SC2688
2SC2690A



CTU-12S

H2S39NB4TD
RD3.6ES-B2
RD3.9ES-B1
RD4.7ES-B1
RD5.6ES-B2
RD6.2ES-B2
RD6.8ES-B2
RD7.5ES-B3
RD9.1ES-B3
RD10ES-B3
RD15ES-B1
RD36ES-B4
RD39ES-B4
1SS119
1SS120
1SS133

SLP162B



MB88503H
TC6011V

(Top view)

TDA8170



DAN-202K

MA3036H
MA3056M
MA3068M
MA3130L

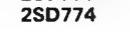
KBU4JL



2SB734
2SC2958
2SD773
2SD774

(Top view)

DAP202K



SR632D

MA3036H
MA3056M
MA3068M
MA3130L

TLR124
LD201VR



NJM7812B
μPC7812J

(Top view)

μPC574J



3

long
short



- NOTE:**
- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - The construction parts of an assembled part are indicated with a callout number in the remark column.
 - Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

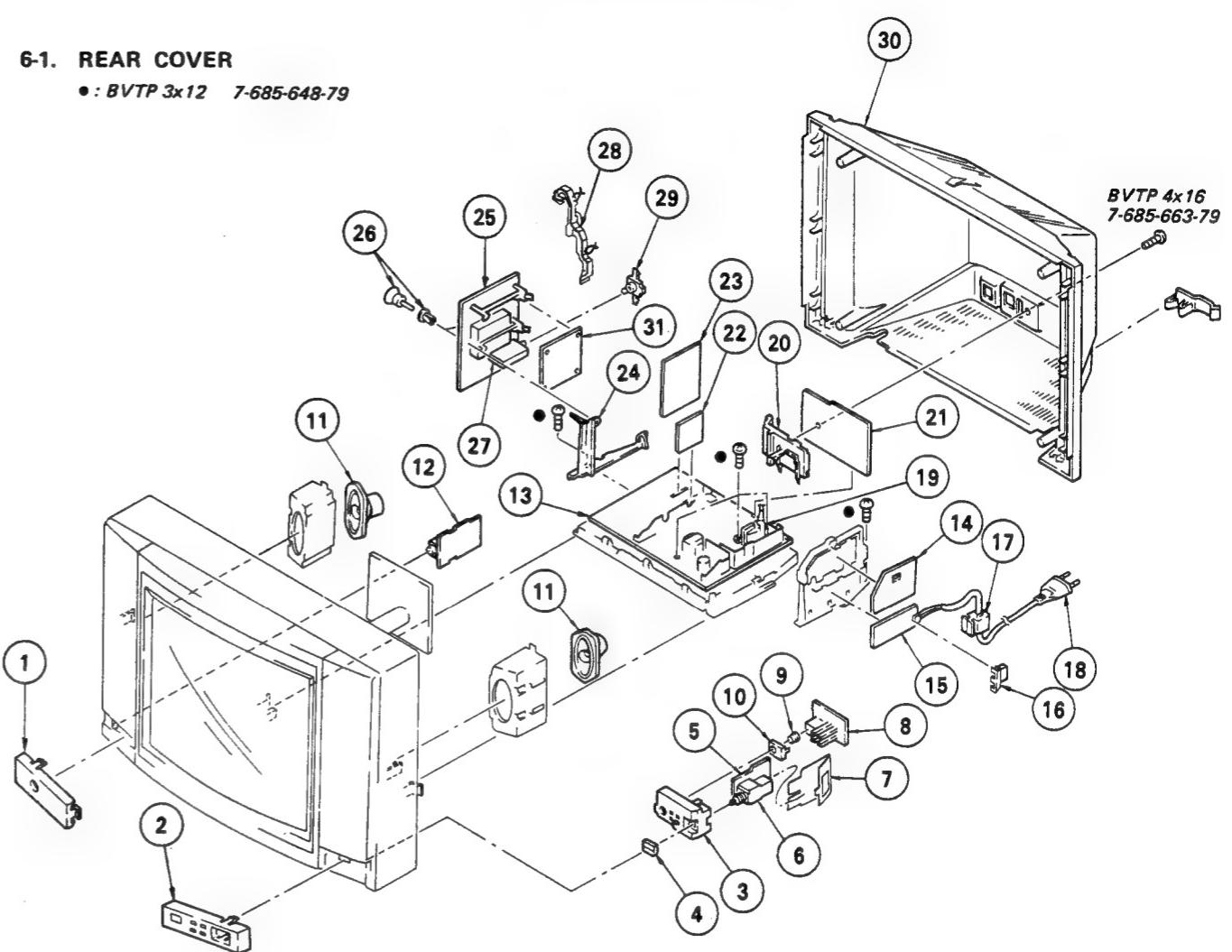
SECTION 6
EXPLODED VIEWS

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

6-2.

6-1. REAR COVER

• : BVTP 3x12 7-685-648-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.
1	4-389-112-01	PLATE (B) (BLACK)		16	*4-386-620-02	COVER, POWER		51
	4-389-112-11	PLATE (B) (GRAY)		17	▲ 4-389-201-02	HOLDER, AC CORD		52
2	X-4389-101-1	PLATE (A) ASSY (BLACK)		18	▲ 1-559-346-12	CORD, POWER (WITH CONNECTOR) (AEP)		53
	X-4389-101-2	PLATE (A) ASSY (GRAY)		19	▲ 1-559-912-12	CORD, POWER (WITH CONNECTOR) (AUS)		
3	*4-389-124-01	PANEL, POWER SWITCH		20	*4-386-624-11	TRANSFORMER ASSY, FLYBACK (UX-1610)		
4	4-389-106-01	BUTTON, POWER (BLACK)		21	*A-1371-577-A	J1 BOARD, COMPLETE		54
	4-389-106-11	BUTTON, POWER (GRAY)		22	*1-629-781-22	KS BOARD		55
5	*1-629-720-22	F2 BOARD		23	*A-1135-594-A	B BOARD, COMPLETE		56
6	▲ 1-571-410-11	SWITCH, PUSH (AC POWER) (1 KEY)		24	*4-386-629-12	BRACKET, A		57
7	*4-387-804-01	INSULATOR		25	*A-1296-569-A	A BOARD, COMPLETE		58
8	*1-629-788-22	H8 BOARD		26	4-386-618-01	RIVET, T TYPE		59
9	*4-374-987-01	GUIDE, LIGHT		27	▲ 1-465-053-11	TUNER, ET (UV-615S)		60
10	*4-388-955-01	BRACKET (B), LIGHT GUIDE		28	*4-386-628-11	SUPPORTER, PC BOARD		
11	1-503-642-41	SPEAKER		29	*4-386-617-01	HOLDER, TERMINAL		
12	*1-629-783-22	J2 BOARD		30	4-389-122-01	COVER, REAR		
13	*A-1345-764-A	D BOARD, COMPLETE		31	*A-1347-030-A	V BOARD, COMPLETE		
14	*A-1341-047-A	D1 BOARD, COMPLETE						
15	*1-629-719-23	F1 BOARD						

SECTION 6

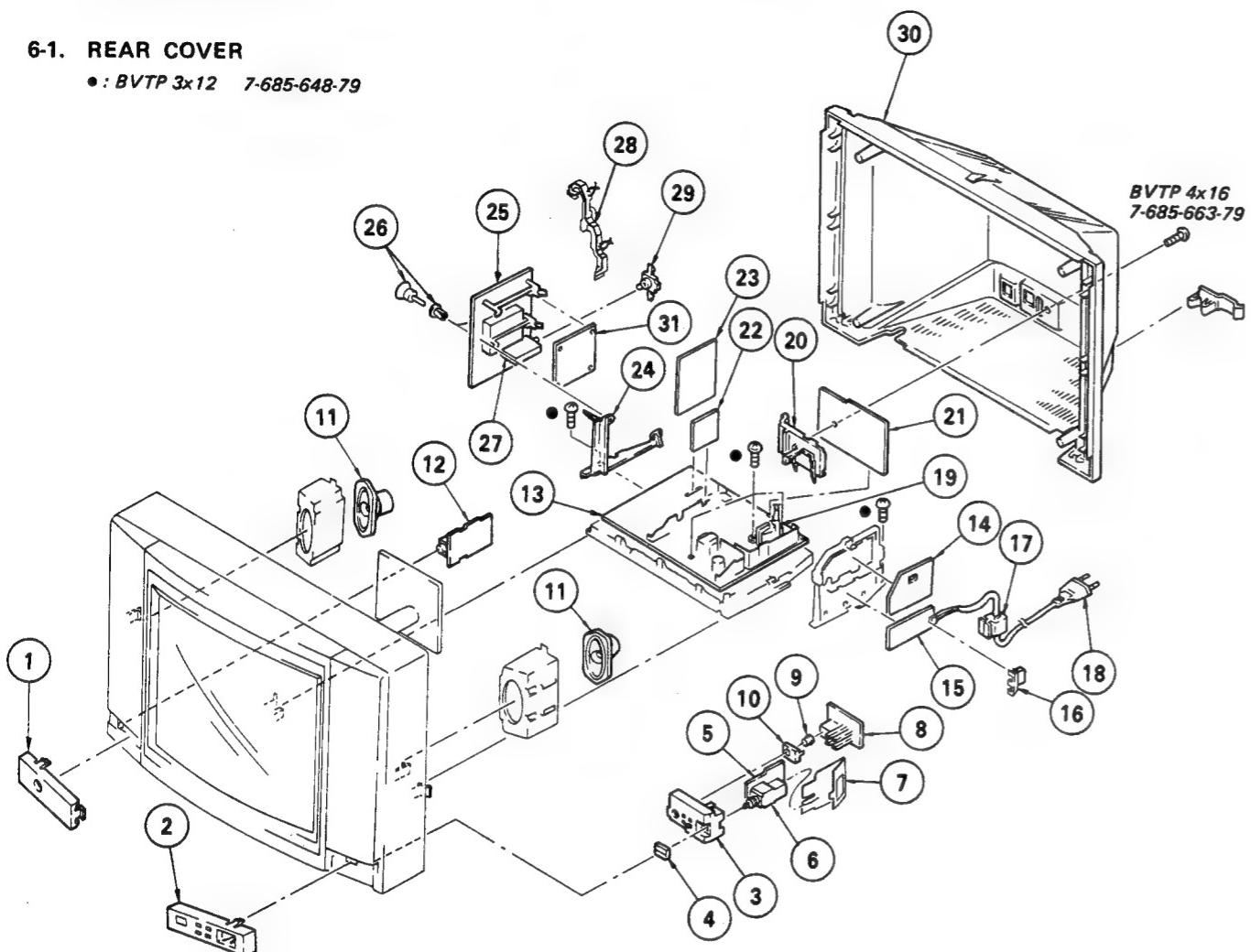
EXPLODED VIEWS

- NOTE:**
- Items with no part number and no description are not stocked because they are seldom required for routine service.
 - The construction parts of an assembled part are indicated with a callout number in the remark column.
 - Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

6-1. REAR COVER

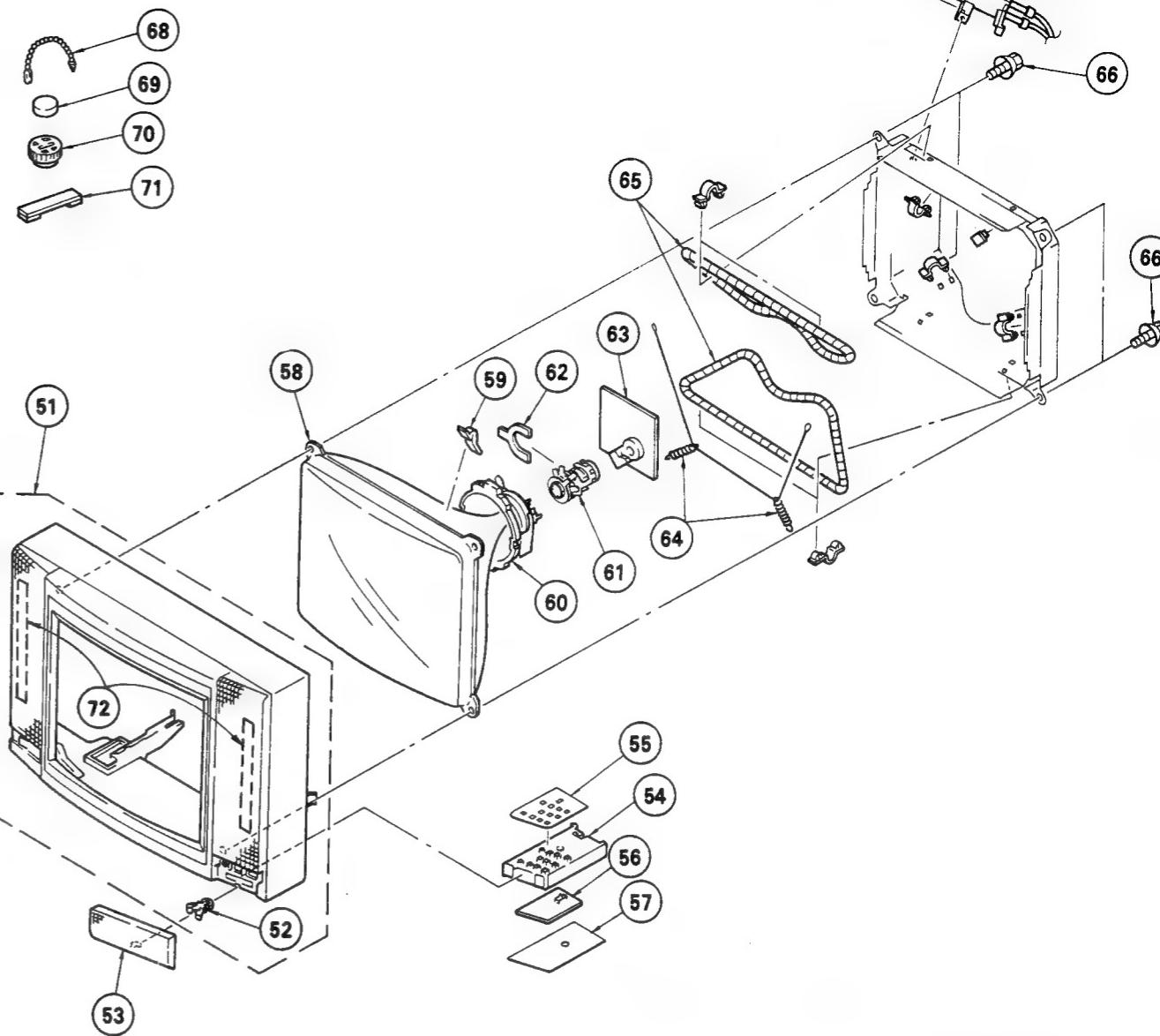
• : BVTP 3x12 7-685-648-79



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-389-112-01	PLATE (B) (BLACK)	
2	4-389-112-11	PLATE (B) (GRAY)	
3	X-4389-101-1	PLATE (A) ASSY (BLACK)	
4	X-4389-101-2	PLATE (A) ASSY (GRAY)	
5	*4-389-124-01	PANEL, POWER SWITCH	
6	4-389-106-01	BUTTON, POWER (BLACK)	
7	4-389-106-11	BUTTON, POWER (GRAY)	
8	*1-629-720-22	F2 BOARD	
9	6 Δ 1-571-410-11	SWITCH, PUSH (AC POWER) (1 KEY)	
10	7 *4-387-804-01	INSULATOR	
11	8 *1-629-788-22	H8 BOARD	
12	9 *4-374-987-01	GUIDE, LIGHT	
13	10 *4-388-955-01	BRACKET (B), LIGHT GUIDE	
14	11 1-503-642-41	SPEAKER	
15	12 *1-629-783-22	J2 BOARD	
16	13 *A-1345-764-A	D BOARD, COMPLETE	
17	14 *A-1341-047-A	D1 BOARD, COMPLETE	
18	15 *1-629-719-23	F1 BOARD	

REF. NO.	PART NO.	DESCRIPTION	REMARK
16	*4-386-620-02	COVER, POWER	
17 Δ	*4-389-201-02	HOLDER, AC CORD	
18 Δ	*1-559-346-12	CORD, POWER (WITH CONNECTOR) (AEP)	
19 Δ	*1-559-912-12	CORD, POWER (WITH CONNECTOR) (AUS)	
20	*4-386-624-11	BRACKET, J	
21	*A-1371-577-A	J1 BOARD, COMPLETE	
22	*1-629-781-22	KS BOARD	
23	*A-1135-594-A	B BOARD, COMPLETE	
24	*4-386-629-12	BRACKET, A	
25	*A-1296-569-A	A BOARD, COMPLETE	
26	*4-386-618-01	RIVET, T TYPE	
27 Δ	*1-465-053-11	TUNER, ET (UV 615S)	
28	*4-386-628-11	SUPPORTER, PC BOARD	
29	*4-386-617-01	HOLDER, TERMINAL	
30	*4-389-122-01	COVER, REAR	
31	*A-1347-030-A	V BOARD, COMPLETE	

6-2. PICTURE TUBE



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4389-104-5	CABINET ASSY (BLACK)		52,72	61 Δ 1-452-391-21	NECK ASSY, PICTURE TUBE (NA305)	
52	X-4389-104-6	CABINET ASSY (GRAY)		52,72	62 1-452-146-21	MAGNET, BMC	
53	4-374-714-01	CATCH, PUSH		63 *A-1330-854-A	C BOARD, COMPLETE		
54	X-4389-102-1	COVER ASSY, ORNAMENTAL (BLACK)		64 4-303-774-99	SPRING		
55	X-4389-102-2	COVER ASSY, ORNAMENTAL (GRAY)		65 Δ 1-426-378-11	COIL, DEMAGNETIZATION		
56	4-389-123-01	PANEL, CONTROL		66 4-374-494-01	SCREW (L), PT		
57	4-389-109-11	LABEL, CONTROL		67 Δ 1-228-544-12	RESISTOR ASSY, HIGH-VOLTAGE		
58	*1-629-787-22	H7 BOARD		68 4-308-870-00	CLIP, LEAD WIRE		
59	*4-389-103-01	COVER, H7		69 1-452-032-00	MAGNET, DISK; 10MM ϕ		
60	*8-736-653-05	PICTURE TUBE (A64JKJ60X)(AEP)		70 1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ		
61	*A-8-736-654-05	PICTURE TUBE (A64JKJ10X)(AUS)		71 X-4306-312-0	PERMALLOY ASSY, CONVERGENCE		
62	3-703-003-00	SPACER, DY		72 4-386-645-01	CUSHION, PICTURE TUBE		
63	*1-451-255-42	DEFLECTION YOKE (Y27FXA)					

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

SECTION 7

ELECTRICAL PARTS LIST

B

NOTE:

The components identified by shading and mark  are critical for safety.

**Replace only with part number
specified.**

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

Note) In this parts list, the mounting diagram is for a different product.
Therefore, an excess of parts is listed.

RESISTORS

- All resistors are in ohms
 - F : nonflammable

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
*A-1135-594-A	B BOARD, COMPLETE					C358	1-124-963-11	ELECT	33MF	20%	16V
	*****					C359	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
						C360	1-163-021-00	CERAMIC CHIP	0.01MF	50V	
						C361	1-163-021-00	CERAMIC CHIP	0.01MF	50V	
	<CAPACITOR>					C364	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C301	1-106-228-00	MYLAR	0.22MF	10%	100V	C365	1-124-477-11	ELECT	47MF	20%	16V
C302	1-106-228-00	MYLAR	0.22MF	10%	100V	C366	1-124-477-11	ELECT	47MF	20%	16V
C303	1-126-101-11	ELECT	100MF	20%	16V	C367	1-163-021-00	CERAMIC CHIP	0.01MF	50V	
C304	1-106-228-00	MYLAR	0.22MF	10%	100V	C368	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C305	1-124-119-00	ELECT	330MF	20%	16V	C381	1-124-902-00	ELECT	0.47MF	20%	50V
C306	1-124-902-00	ELECT	0.47MF	20%	50V	C382	1-124-927-11	ELECT	4.7MF	20%	50V
C307	1-124-902-00	ELECT	0.47MF	20%	50V	C384	1-124-477-11	ELECT	47MF	20%	16V
C308	1-124-902-00	ELECT	0.47MF	20%	50V	C385	1-124-927-11	ELECT	4.7MF	20%	50V
C309	1-124-902-00	ELECT	0.47MF	20%	50V	C386	1-124-927-11	ELECT	4.7MF	20%	50V
C310	1-106-220-00	MYLAR	0.1MF	10%	100V	C387	1-124-902-00	ELECT	0.47MF	20%	50V
C311	1-106-220-00	MYLAR	0.1MF	10%	100V	C1311	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C312	1-124-902-00	ELECT	0.47MF	20%	50V	C1313	1-163-107-00	CERAMIC CHIP	39PF	5%	50V
C313	1-124-902-00	ELECT	0.47MF	20%	50V		<CONNECTOR>				
C314	1-124-902-00	ELECT	0.47MF	20%	50V						
C315	1-124-499-11	ELECT	1MF	20%	50V						
C319	1-124-477-11	ELECT	47MF	20%	16V	CNB31	*1-562-370-21	CONNECTOR, BOARD TO BOARD	18P		
C322	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	CNB72	*1-564-895-11	PLUG, CONNECTOR	6P		
C325	1-124-477-11	ELECT	47MF	20%	16V	CNB73	*1-564-880-31	PLUG, CONNECTOR	3P		
C326	1-163-021-00	CERAMIC CHIP	0.01MF			CNB93	*1-560-278-41	PLUG, CONNECTOR	6P		
C327	1-163-021-00	CERAMIC CHIP	0.01MF			CNB95	*1-560-290-00	PLUG, CONNECTOR	(2.5MM PITCH)		
C330	1-163-021-00	CERAMIC CHIP	0.01MF								
C331	1-124-963-11	ELECT	33MF	20%	16V						
C332	1-124-119-00	ELECT	330MF	20%	16V						
C333	1-163-033-00	CERAMIC CHIP	0.022MF			CT331	1-141-181-11	CAP, TRIMMER			
C334	1-163-111-00	CERAMIC CHIP	56PF	5%	50V	CT332	1-141-181-11	CAP, TRIMMER			
C335	1-163-035-00	CERAMIC CHIP	0.047MF								
C336	1-106-367-00	MYLAR	0.01MF	10%	400V						
C337	1-163-021-00	CERAMIC CHIP	0.01MF								
C338	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	D301	8-719-400-18	DIODE	MA152WK		
C339	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	D302	8-719-400-18	DIODE	MA152WK		
C340	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	D303	8-719-400-18	DIODE	MA152WK		
C341	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	D304	8-719-400-18	DIODE	MA152WK		
C342	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	D305	8-719-400-18	DIODE	MA152WK		
C343	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	D307	8-719-106-62	DIODE	RD11M-B2		
C344	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	D309	8-719-400-18	DIODE	MA152WK		
C345	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	D310	8-719-106-62	DIODE	RD11M-B2		
C346	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	D311	8-719-106-62	DIODE	RD11M-B2		
C347	1-124-499-11	ELECT	1MF	20%	50V	D312	8-719-106-62	DIODE	RD11M-B2		
C348	1-124-499-11	ELECT	1MF	20%	50V	D313	8-719-106-62	DIODE	RD11M-B2		
C349	1-136-173-00	FILM	0.47MF	5%	50V	D314	8-719-800-76	DIODE	ISS226		
C350	1-106-383-00	MYLAR	0.047MF	10%	100V	D315	8-719-800-76	DIODE	ISS226		
C351	1-106-375-12	MYLAR	0.022MF	10%	250V	D316	8-719-800-76	DIODE	ISS226		
C352	1-106-375-12	MYLAR	0.022MF	10%	250V	D331	8-719-400-18	DIODE	MA152WK		
C354	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	D333	8-719-400-18	DIODE	MA152WK		
C355	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	D341	8-719-400-18	DIODE	MA152WK		
C357	1-163-107-00	CERAMIC CHIP	39PF	5%	50V						

B

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<DELAY LINE>							
DL331	1-415-122-00	DELAY LINE		JW1314	1-216-296-00	METAL GLAZE 0	5% 1/8W
DL332	1-236-062-11	MODULE, Y DELAY LINE		JW1315	1-216-295-00	METAL GLAZE 0	5% 1/10W
<IC>							
IC301	8-759-979-85	IC TDA4580-V4		JW1316	1-216-296-00	METAL GLAZE 0	5% 1/8W
IC302	8-759-980-60	IC TDA8442-N3		JW1317	1-216-296-00	METAL GLAZE 0	5% 1/8W
IC331	8-759-947-20	IC TDA4555-V8		JW1319	1-216-295-00	METAL GLAZE 0	5% 1/10W
IC1301	1-235-534-11	CONTROL MODULE, PICTURE		JW1320	1-216-295-00	METAL GLAZE 0	5% 1/10W
<COIL>				R301	1-216-033-00	METAL GLAZE 220	5% 1/10W
L301	1-410-868-21	INDUCTOR	4.7UH	R302	1-216-033-00	METAL GLAZE 220	5% 1/10W
L302	1-410-868-21	INDUCTOR	4.7UH	R303	1-216-033-00	METAL GLAZE 220	5% 1/10W
L304	1-408-409-00	INDUCTOR	10UH	R304	1-216-033-00	METAL GLAZE 220	5% 1/10W
L331	1-408-408-00	INDUCTOR	8.2UH	R305	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
L332	1-404-539-11	COIL		R307	1-216-097-00	METAL GLAZE 100K	5% 1/10W
L333	1-404-554-11	COIL		R308	1-216-043-00	METAL GLAZE 560	5% 1/10W
L334	1-404-554-11	COIL		R309	1-216-025-00	METAL GLAZE 100	5% 1/10W
L335	1-404-554-11	COIL		R310	1-216-025-00	METAL GLAZE 100	5% 1/10W
L336	1-408-417-00	INDUCTOR	47UH	R311	1-216-025-00	METAL GLAZE 100	5% 1/10W
L338	1-408-416-00	INDUCTOR	39UH	R312	1-216-033-00	METAL GLAZE 220	5% 1/10W
L339	1-410-868-21	INDUCTOR	4.7UH	R313	1-216-081-00	METAL GLAZE 22K	5% 1/10W
<TRANSISTOR>				R314	1-216-041-00	METAL GLAZE 470	5% 1/10W
Q302	8-729-271-22	TRANSISTOR 2SC2712G		R315	1-216-029-00	METAL GLAZE 150	5% 1/10W
Q303	8-729-271-22	TRANSISTOR 2SC2712G		R316	1-216-029-00	METAL GLAZE 150	5% 1/10W
Q305	8-729-901-00	TRANSISTOR DTC124EK		R317	1-216-029-00	METAL GLAZE 150	5% 1/10W
Q306	8-729-271-22	TRANSISTOR 2SC2712G		R318	1-216-222-00	METAL GLAZE 10K	5% 1/8W
Q311	8-729-271-22	TRANSISTOR 2SC2712G		R319	1-216-033-00	METAL GLAZE 220	5% 1/10W
Q312	8-729-271-22	TRANSISTOR 2SC2712G		R320	1-216-049-00	METAL GLAZE 1K	5% 1/10W
Q313	8-729-271-22	TRANSISTOR 2SC2712G		R321	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
Q316	8-729-271-22	TRANSISTOR 2SC2712G		R322	1-216-055-00	METAL GLAZE 1.8K	5% 1/10W
Q331	8-729-271-22	TRANSISTOR 2SC2712G		R323	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
Q332	8-729-901-00	TRANSISTOR DTC124EK		R324	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
Q333	8-729-901-00	TRANSISTOR DTC124EK		R325	1-216-073-00	METAL GLAZE 10K	5% 1/10W
Q334	8-729-271-22	TRANSISTOR 2SC2712G		R326	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
Q335	8-729-271-22	TRANSISTOR 2SC2712G		R327	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
Q381	8-729-901-00	TRANSISTOR DTC124EK		R328	1-216-009-00	METAL GLAZE 22	5% 1/10W
Q382	8-729-271-22	TRANSISTOR 2SC2712G		R329	1-216-009-00	METAL GLAZE 22	5% 1/10W
Q1305	8-729-271-22	TRANSISTOR 2SC2712G		R330	1-216-009-00	METAL GLAZE 22	5% 1/10W
Q1306	8-729-216-22	TRANSISTOR 2SA1162		R331	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
<RESISTOR>				R332	1-216-017-00	METAL GLAZE 47	5% 1/10W
JW303	1-216-295-00	METAL GLAZE 0	5% 1/10W	R333	1-216-039-00	METAL GLAZE 390	5% 1/10W
JW306	1-216-295-00	METAL GLAZE 0	5% 1/10W	R334	1-216-031-00	METAL GLAZE 180	5% 1/10W
JW307	1-216-295-00	METAL GLAZE 0	5% 1/10W	R335	1-216-045-00	METAL GLAZE 680	5% 1/10W
JW1301	1-216-296-00	METAL GLAZE 0	5% 1/8W	R336	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
JW1302	1-216-296-00	METAL GLAZE 0	5% 1/8W	R337	1-216-066-00	METAL GLAZE 5.1K	5% 1/10W
JW1303	1-216-295-00	METAL GLAZE 0	5% 1/10W	R338	1-216-073-00	METAL GLAZE 10K	5% 1/10W
JW1304	1-216-295-00	METAL GLAZE 0	5% 1/10W	R339	1-216-033-00	METAL GLAZE 220	5% 1/10W
JW1305	1-216-296-00	METAL GLAZE 0	5% 1/8W	R340	1-216-089-00	METAL GLAZE 47K	5% 1/10W
JW1306	1-216-296-00	METAL GLAZE 0	5% 1/8W	R341	1-216-035-00	METAL GLAZE 270	5% 1/10W
JW1307	1-216-295-00	METAL GLAZE 0	5% 1/10W	R342	1-216-073-00	METAL GLAZE 10K	5% 1/10W
JW1308	1-216-296-00	METAL GLAZE 0	5% 1/8W	R343	1-216-073-00	METAL GLAZE 10K	5% 1/10W
JW1309	1-216-296-00	METAL GLAZE 0	5% 1/8W	R344	1-216-089-00	METAL GLAZE 47K	5% 1/10W
JW1310	1-216-296-00	METAL GLAZE 0	5% 1/8W	R346	1-216-202-00	METAL GLAZE 1.5K	5% 1/8W
JW1305	1-216-296-00	METAL GLAZE 0	5% 1/8W	R347	1-216-073-00	METAL GLAZE 10K	5% 1/10W
JW1306	1-216-296-00	METAL GLAZE 0	5% 1/8W	R348	1-216-089-00	METAL GLAZE 47K	5% 1/10W
JW1307	1-216-295-00	METAL GLAZE 0	5% 1/10W	R352	1-216-109-00	METAL GLAZE 330K	5% 1/10W
JW1308	1-216-296-00	METAL GLAZE 0	5% 1/8W	R353	1-216-109-00	METAL GLAZE 330K	5% 1/10W
JW1309	1-216-296-00	METAL GLAZE 0	5% 1/8W	R354	1-216-033-00	METAL GLAZE 220	5% 1/10W
JW1310	1-216-296-00	METAL GLAZE 0	5% 1/8W	R355	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
JW1306	1-216-296-00	METAL GLAZE 0	5% 1/8W	R356	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
JW1307	1-216-295-00	METAL GLAZE 0	5% 1/10W	R357	1-216-033-00	METAL GLAZE 220	5% 1/10W
JW1308	1-216-296-00	METAL GLAZE 0	5% 1/8W	R358	1-216-033-00	METAL GLAZE 220	5% 1/10W
JW1309	1-216-296-00	METAL GLAZE 0	5% 1/8W	R359	1-216-089-00	METAL GLAZE 47K	5% 1/10W
JW1310	1-216-296-00	METAL GLAZE 0	5% 1/8W	R360	1-216-089-00	METAL GLAZE 47K	5% 1/10W
JW1311	1-216-295-00	METAL GLAZE 0	5% 1/10W	R361	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
JW1312	1-216-295-00	METAL GLAZE 0	5% 1/10W	R363	1-216-035-00	METAL GLAZE 270	5% 1/10W
JW1313	1-216-295-00	METAL GLAZE 0	5% 1/10W	R364	1-216-049-00	METAL GLAZE 1K	5% 1/10W

The components identified by shading and mark ▲ are critical for safety.
Replace only with part number specified.

B**F1****F2****A**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R365	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R367	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R368	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R369	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R370	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W				
R371	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R376	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R378	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
R379	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
R380	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W				
R381	1-216-093-00	METAL GLAZE	68K 5% 1/10W				
R382	1-216-103-00	METAL GLAZE	180K 5% 1/10W				
R383	1-216-111-00	METAL GLAZE	390K 5% 1/10W				
R385	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R386	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
R389	1-216-101-00	METAL GLAZE	150K 5% 1/10W				
R391	1-216-023-00	METAL GLAZE	82 5% 1/10W				
R392	1-216-019-00	METAL GLAZE	56 5% 1/10W				
R393	1-216-019-00	METAL GLAZE	56 5% 1/10W				
R394	1-216-019-00	METAL GLAZE	56 5% 1/10W				
R398	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R1301	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R1302	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R1303	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R1304	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
R1324	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
<VARIABLE RESISTOR>							
RV331	1-238-009-11	RES, ADJ, CARBON	220				
<TRANSFORMER>							
T331	1-404-584-11	COIL					
<CRYSTAL>							
X331	1-567-307-11	OSCILLATOR, CRYSTAL					
X332	1-567-131-00	OSCILLATOR, CRYSTAL					

*1-629-719-23	F1 BOARD		*****				
<CAPACITOR>							
C1601▲	1-136-518-11	FILEM	0.33MF 20% 300V				
C1602▲	1-136-519-11	FILEM	0.47MF 20% 300V				
C1603▲	1-162-578-51	CERAMIC	0.0047MF 20% 400V				
C1604▲	1-162-578-51	CERAMIC	0.0047MF 20% 400V				
C1605▲	1-162-578-51	CERAMIC	0.0047MF 20% 400V				
C1606▲	1-162-578-51	CERAMIC	0.0047MF 20% 400V				
C1607▲	1-161-964-61	CERAMIC	0.0047MF 20% 250V				
<CONNECTOR>							
CNF61	*1-566-664-11	PIN, CONNECTOR 4P					
CNF64	*1-506-348-99	PIN, CONNECTOR 3P					
CNF65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P					
CNF66	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P					
CNF67	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)					
CNF162	*1-506-348-99	PIN, CONNECTOR 4P					

C101	1-126-233-11	ELECT	22MF 20% 50V				
C102	1-126-103-11	ELECT	470MF 20% 16V				
C103	1-106-220-00	MYLAR	0.1MF 10% 100V				
C104	1-106-216-00	MYLAR	0.068MF 10% 100V				
C105	1-106-216-00	MYLAR	0.068MF 10% 100V				
C106	1-101-004-00	CERAMIC	0.01MF 50V				
C107	1-102-963-00	CERAMIC	33PF 5% 50V				
C108	1-124-963-11	ELECT	33MF 20% 16V				
C109	1-101-003-00	CERAMIC	0.0047MF 50V				
C110	1-124-499-11	ELECT	1MF 20% 50V				
C111	1-101-003-00	CERAMIC	0.0047MF 50V				
C112	1-101-003-00	CERAMIC	0.0047MF 50V				
C113	1-101-003-00	CERAMIC	0.0047MF 50V				
C114	1-124-963-11	ELECT	33MF 20% 16V				
C118	1-101-880-00	CERAMIC	47PF 5% 50V				
C119	1-126-101-11	ELECT	100MF 20% 16V				
C120	1-124-925-11	ELECT	2.2MF 20% 50V				
C121	1-101-003-00	CERAMIC	0.0047MF 50V				
C122	1-101-003-00	CERAMIC	0.0047MF 50V				
C123	1-106-351-00	MYLAR	0.0022MF 10% 100V				
C124	1-101-888-00	CERAMIC	68PF 5% 50V				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
C125	1-101-888-00	CERAMIC	68PF	5%	50V			
C127	1-101-003-00	CERAMIC	0.0047MF	50V				
C128	1-124-963-11	ELECT	33MF	20%	16V			
C129	1-101-888-00	CERAMIC	68PF	5%	50V			
C130	1-101-004-00	CERAMIC	0.01MF	50V				
C131	1-101-006-00	CERAMIC	0.047MF	50V				
C132	1-124-499-11	ELECT	1MF	20%	50V			
C133	1-101-003-00	CERAMIC	0.0047MF	50V				
C134	1-124-499-11	ELECT	1MF	20%	50V			
C135	1-101-004-00	CERAMIC	0.01MF	50V				
C136	1-101-006-00	CERAMIC	0.047MF	50V				
C137	1-101-880-00	CERAMIC	47PF	5%	50V			
C138	1-124-925-11	ELECT	2.2MF	20%	50V			
C139	1-123-875-11	ELECT	10MF	20%	50V			
C140	1-108-614-11	MYLAR	0.001MF	10%	100V			
C141	1-136-298-00	FILM	0.0033MF	2%	100V			
C142	1-102-816-00	CERAMIC	120PF	5%	50V			
C143	1-101-361-00	CERAMIC	150PF	5%	50V			
C144	1-124-477-11	ELECT	47MF	20%	16V			
C145	1-124-477-11	ELECT	47MF	20%	16V			
C146	1-124-477-11	ELECT	47MF	20%	16V			
C147	1-124-477-11	ELECT	47MF	20%	16V			
C148	1-123-875-11	ELECT	10MF	20%	50V			
C149	1-136-153-00	FILM	0.01MF	5%	50V			
C150	1-136-153-00	FILM	0.01MF	5%	50V			
C151	1-126-233-11	ELECT	22MF	20%	50V			
C152	1-126-233-11	ELECT	22MF	20%	50V			
C153	1-136-165-00	FILM	0.1MF	5%	50V			
C154	1-136-169-00	FILM	0.22MF	5%	50V			
C155	1-124-963-11	ELECT	33MF	20%	16V			
C156	1-136-157-00	FILM	0.022MF	5%	50V			
C157	1-136-161-00	FILM	0.047MF	5%	50V			
C158	1-124-963-11	ELECT	33MF	20%	16V			
C159	1-124-477-11	ELECT	47MF	20%	16V			
C160	1-124-477-11	ELECT	47MF	20%	16V			
C162	1-102-816-00	CERAMIC	120PF	5%	50V			
C163	1-124-927-11	ELECT	4.7MF	20%	50V			
C164	1-106-367-00	MYLAR	0.01MF	10%	400V			
C165	1-136-287-11	FILM	0.0047MF	5%	50V			
C167	1-124-499-11	ELECT	1MF	20%	50V			
C168	1-106-228-00	MYLAR	0.22MF	10%	100V			
C169	1-123-875-11	ELECT	10MF	20%	50V			
C174	1-124-499-11	ELECT	1MF	20%	50V			
C177	1-102-119-00	CERAMIC	0.0015MF	10%	50V			
C186	1-101-004-00	CERAMIC	0.01MF		50V			
C187	1-101-003-00	CERAMIC	0.0047MF		50V			
C188	1-124-963-11	ELECT	33MF	20%	16V			
C189	1-124-963-11	ELECT	33MF	20%	16V			
C190	1-106-220-00	MYLAR	0.1MF	10%	100V			
<FILTER>								
<RESISTOR>								
CD102	1-404-745-11	DISCRIMINATOR, CERAMIC			R101	1-249-405-11	CARBON	100 5% 1/4W
CD103	1-404-746-11	DISCRIMINATOR, CERAMIC			R102	1-249-423-11	CARBON	3.3K 5% 1/4W
CF101	1-404-134-00	TRAP, CERAMIC (5.5MHZ)			R103	1-249-433-11	CARBON	22K 5% 1/4W
CF103	1-527-840-00	FILTER, CERAMIC			R104	1-249-429-11	CARBON	10K 5% 1/4W
CF104	1-527-839-00	FILTER, CERAMIC			R105	1-249-418-11	CARBON	1.2K 5% 1/4W
SWF101	1-577-254-11	SAWF			R106	1-247-891-00	CARBON	330K 5% 1/4W
<CONNECTOR>								
CNA11	*1-566-659-11	CONNECTOR, HINGE (SOCKET) 18P			R107	1-249-421-11	CARBON	2.2K 5% 1/4W
CNA16	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)			R108	1-249-421-11	CARBON	2.2K 5% 1/4W
CNA17	*1-564-886-21	PLUG, CONNECTOR 9P			R109	1-249-423-11	CARBON	3.3K 5% 1/4W
					R110	1-249-410-11	CARBON	270 5% 1/4W
					R111	1-249-416-11	CARBON	820 5% 1/4W
					R112	1-249-421-11	CARBON	2.2K 5% 1/4W

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A**C**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
R114	1-249-413-11	CARBON	470 5% 1/4W	*****				
R115	1-249-413-11	CARBON	470 5% 1/4W	*A-1330-854-A C BOARD, COMPLETE				
R116	1-249-419-11	CARBON	1.5K 5% 1/4W	*****				
R117	1-249-431-11	CARBON	15K 5% 1/4W	*****				
R118	1-249-425-11	CARBON	4.7K 5% 1/4W	*****				
R119	1-249-417-11	CARBON	1K 5% 1/4W	<CAPACITOR>				
R121	1-249-429-11	CARBON	10K 5% 1/4W	C703	1-102-980-00	CERAMIC	270PF 5% 50V	
R122	1-249-436-11	CARBON	39K 5% 1/4W	C704	1-102-116-00	CERAMIC	680PF 10% 50V	
R123	1-249-417-11	CARBON	1K 5% 1/4W	C705	1-102-978-00	CERAMIC	220PF 5% 50V	
R124	1-249-423-11	CARBON	3.3K 5% 1/4W	C706	1-102-116-00	CERAMIC	680PF 10% 50V	
R125	1-249-429-11	CARBON	10K 5% 1/4W	C709	1-102-116-00	CERAMIC	680PF 10% 50V	
R127	1-249-432-11	CARBON	18K 5% 1/4W	C710	1-123-947-00	ELECT	10MF 20% 250V	
R128	1-249-432-11	CARBON	18K 5% 1/4W	C711	1-101-880-00	CERAMIC	47PF 5% 50V	
R129	1-249-429-11	CARBON	10K 5% 1/4W	C712	1-102-980-00	CERAMIC	270PF 5% 50V	
R130	1-249-429-11	CARBON	10K 5% 1/4W	C714	1-124-360-00	ELECT	1000MF 20% 16V	
R132	1-249-414-11	CARBON	560 5% 1/4W	C717	1-102-114-00	CERAMIC	470PF 10% 50V	
R133	1-249-425-11	CARBON	4.7K 5% 1/4W	C718	1-102-114-00	CERAMIC	470PF 10% 50V	
R134	1-249-414-11	CARBON	560 5% 1/4W	C719	1-102-114-00	CERAMIC	470PF 10% 50V	
R135	1-249-419-11	CARBON	1.5K 5% 1/4W	C741	1-136-601-11	FILM	0.01MF 10% 630V	
R136	1-249-414-11	CARBON	560 5% 1/4W	C742	1-162-116-00	CERAMIC	680PF 10% 2KV	
R137	1-249-414-11	CARBON	560 5% 1/4W	C751	1-101-361-00	CERAMIC	150PF 5% 50V	
R138	1-249-419-11	CARBON	1.5K 5% 1/4W	C752	1-106-373-00	MYLAR	0.018MF 10% 250V	
R139	1-249-431-11	CARBON	15K 5% 1/4W	C753	1-106-367-00	MYLAR	0.01MF 10% 400V	
R140	1-249-441-11	CARBON	100K 5% 1/4W	C754	1-102-980-00	CERAMIC	270PF 5% 50V	
R141	1-249-425-11	CARBON	4.7K 5% 1/4W	C757	1-108-692-11	MYLAR	0.01MF 10% 200V	
R142	1-249-441-11	CARBON	100K 5% 1/4W	C759	1-123-875-11	ELECT	10MF 20% 50V	
R143	1-249-441-11	CARBON	100K 5% 1/4W	C760	1-124-917-11	ELECT	33MF 20% 50V	
R144	1-249-422-11	CARBON	2.7K 5% 1/4W	C761	1-101-006-00	CERAMIC	0.047MF 50V	
R146	1-249-424-11	CARBON	3.9K 5% 1/4W	C762	1-106-367-00	MYLAR	0.01MF 10% 400V	
R148	1-249-413-11	CARBON	470 5% 1/4W	<CONNECTOR>				
R150	1-249-423-11	CARBON	3.3K 5% 1/4W	PNC71	*1-506-348-99	PIN, CONNECTOR 3P		
R151	1-249-423-11	CARBON	3.3K 5% 1/4W	CNC72	*1-564-883-11	PLUG, CONNECTOR 6P		
R152	1-249-431-11	CARBON	15K 5% 1/4W	CNC73	*1-564-880-31	PLUG, CONNECTOR 3P		
R153	1-249-416-11	CARBON	820 5% 1/4W	CNC75	*1-564-879-11	PLUG, CONNECTOR 2P		
R154	1-249-441-11	CARBON	100K 5% 1/4W	CNC81	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)		
R155	1-249-430-11	CARBON	12K 5% 1/4W	CNC82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		
R156	1-247-881-00	CARBON	120K 5% 1/4W	CNC87	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		
R161	1-249-427-11	CARBON	6.8K 5% 1/4W	<DIODE>				
R163	1-249-424-11	CARBON	3.9K 5% 1/4W	D701	8-719-110-14	DIODE RD9.1ES-B3		
R165	1-249-423-11	CARBON	3.3K 5% 1/4W	D702	8-719-911-19	DIODE ISS119		
R166	1-249-437-11	CARBON	47K 5% 1/4W	D703	8-719-911-19	DIODE ISS119		
R171	1-249-417-11	CARBON	1K 5% 1/4W	D704	8-719-911-19	DIODE ISS119		
R174	1-249-429-11	CARBON	10K 5% 1/4W	D705	8-719-911-19	DIODE ISS119		
R175	1-249-429-11	CARBON	10K 5% 1/4W	D706	8-719-911-19	DIODE ISS119		
R177	1-249-417-11	CARBON	1K 5% 1/4W	D707	8-719-911-19	DIODE ISS119		
R178	1-249-401-11	CARBON	47 5% 1/4W	D708	8-719-911-19	DIODE ISS119		
R179	1-249-401-11	CARBON	47 5% 1/4W	D709	8-719-911-19	DIODE ISS119		
R188	1-249-419-11	CARBON	1.5K 5% 1/4W	D710	8-719-911-19	DIODE ISS119		
R189	1-249-419-11	CARBON	1.5K 5% 1/4W	D711	8-719-300-33	DIODE RU-3AM		
<VARIABLE RESISTOR>					D713	8-719-911-19	DIODE ISS119	
RV101	1-237-753-11	RES, ADJ, CARBON	47K	<TRANSFORMER>				
RV102	1-237-751-11	RES, ADJ, CARBON	10K	J701	1-526-644-51	SOCKET, PICTURE TUBE		
RV103	1-237-753-11	RES, ADJ, CARBON	47K	<COIL>				
<TUNER>					L704	1-410-878-21	INDUCTOR	33UH
TU101A 1-465-053-11 TUNER, ET (UV-615S)					L751	1-408-413-00	INDUCTOR	22UH

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<TRANSISTOR>											
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE		R762	1-247-895-00	CARBON	470K 5% 1/4W				
Q703	8-729-326-11	TRANSISTOR 2SC2611		R763	1-249-429-11	CARBON	10K 5% 1/4W				
*4-386-664-01	SPRING; Q703			R764	1-249-455-11	CARBON	4.7 5% 1/4W F				
Q704	8-729-200-17	TRANSISTOR 2SA1091		R765	1-249-455-11	CARBON	4.7 5% 1/4W F				
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE		R766	1-247-753-11	CARBON	1.2K 5% 1/2W				
Q706	8-729-326-11	TRANSISTOR 2SC2611		R767	1-247-751-11	CARBON	820 5% 1/2W				
*4-386-664-01	SPRING; Q706			R768	1-215-887-00	METAL OXIDE	150 5% 2W F				
Q707	8-729-200-17	TRANSISTOR 2SA1091		R769	1-212-889-00	FUSIBLE	220 5% 1/4W F				
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE		R770	1-212-869-00	FUSIBLE	33 5% 1/4W F				
Q709	8-729-326-11	TRANSISTOR 2SC2611		<VARIABLE RESISTOR>							
*4-386-664-01	SPRING; Q709			RV703	1-237-749-11	RES, ADJ, CARBON	2200				
Q710	8-729-200-17	TRANSISTOR 2SA1091		RV704	1-237-749-11	RES, ADJ, CARBON	2200				
Q751	8-729-119-78	TRANSISTOR 2SC2785-HFE		RV741	1-230-641-11	RES, ADJ, METAL GLAZE	2.2M				
Q752	8-729-119-78	TRANSISTOR 2SC2785-HFE		<SPARK GAP>							
Q753	8-729-140-97	TRANSISTOR 2SB734-34		SG701	1-519-063-99	DISCHARGING GAP					
Q754	8-729-140-96	TRANSISTOR 2SD774-34		SG702	1-519-063-99	DISCHARGING GAP					
<RESISTOR>											
R704	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	***** *A-1341-047-A D1 BOARD, COMPLETE *****							
R705	1-202-824-00	SOLID	3.3K 10% 1/2W	<CAPACITOR>							
R706	1-249-409-11	CARBON	220 5% 1/4W	C5001	1-124-122-11	ELECT	100MF 20% 50V				
R707	1-249-412-11	CARBON	390 5% 1/4W	C5002	1-124-122-11	ELECT	100MF 20% 50V				
R708	1-249-401-11	CARBON	47 5% 1/4W	C5003	1-126-233-11	ELECT	22MF 20% 50V				
R710	1-215-465-00	METAL	68K 1% 1/6W	C5004	1-102-030-00	CERAMIC	330PF 10% 500V				
R712	1-249-417-11	CARBON	1K 5% 1/4W	C5005	1-129-741-00	FILM	0.015MF 10% 400V				
R713	1-215-471-00	METAL	120K 1% 1/6W	C5006	1-124-342-00	ELECT	3.3MF 20% 160V				
R714	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	C5007	1-126-101-11	ELECT	100MF 20% 16V				
R715	1-202-824-00	SOLID	3.3K 10% 1/2W	C5008	1-102-157-00	CERAMIC	560PF 10% 500V				
R716	1-249-409-11	CARBON	220 5% 1/4W	C5009	1-108-619-11	MYLAR	0.0027MF 10% 100V				
R717	1-249-415-11	CARBON	680 5% 1/4W	C5010	1-124-963-11	ELECT	33MF 20% 16V				
R719	1-249-401-11	CARBON	47 5% 1/4W	C5011	1-108-702-11	MYLAR	0.068MF 10% 200V				
R720	1-249-423-11	CARBON	3.3K 5% 1/4W	C5012	1-130-783-00	MYLAR	0.33MF 10% 100V				
R723	1-249-417-11	CARBON	1K 5% 1/4W	C5013	1-124-934-11	ELECT	330MF 20% 100V				
R726	1-202-824-00	SOLID	3.3K 10% 1/2W	C5014	1-131-349-00	TANTALUM	2.2MF 10% 35V				
R727	1-249-409-11	CARBON	220 5% 1/4W	C5016	1-106-383-00	MYLAR	0.047MF 10% 100V				
R728	1-216-350-11	METAL OXIDE	1.2 5% 1W F	C5017	1-126-101-11	ELECT	100MF 20% 16V				
R729	1-249-416-11	CARBON	820 5% 1/4W	C5018	1-126-233-11	ELECT	22MF 20% 50V				
R730	1-249-401-11	CARBON	47 5% 1/4W	C5019	1-124-925-11	ELECT	2.2MF 20% 50V				
R731	1-249-423-11	CARBON	3.3K 5% 1/4W	C5020	1-126-233-11	ELECT	22MF 20% 50V				
R732	1-249-415-11	CARBON	680 5% 1/4W	C5021	1-123-382-00	ELECT	3.3MF 20% 50V				
R733	1-249-415-11	CARBON	680 5% 1/4W	C5017	1-126-101-11	ELECT	100MF 20% 16V				
R734	1-249-405-11	CARBON	100 5% 1/4W	C5018	1-126-233-11	ELECT	22MF 20% 50V				
R735	1-215-493-00	METAL	1M 1% 1/6W	C5019	1-124-925-11	ELECT	2.2MF 20% 50V				
R736	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	C5020	1-126-233-11	ELECT	22MF 20% 50V				
R737	1-215-481-00	METAL	330K 1% 1/6W	C5021	1-106-363-00	MYLAR	0.0068MF 10% 400V				
R739	1-249-417-11	CARBON	1K 5% 1/4W	C5023	1-124-477-11	ELECT	47MF 20% 16V				
R742	1-202-838-00	SOLID	100K 10% 1/2W	C5024	1-124-122-11	ELECT	100MF 20% 50V				
R744	1-202-844-00	SOLID	330K 10% 1/2W	C5025	1-106-363-00	MYLAR	0.033MF 10% 250V				
R745	1-202-842-11	SOLID	220K 10% 1/2W	C5026	1-106-379-12	MYLAR	0.01MF 5% 100V				
R751	1-249-418-11	CARBON	1.2K 5% 1/4W	C5027	1-106-218-00	MYLAR	0.082MF 10% 100V				
R752	1-249-426-11	CARBON	5.6K 5% 1/4W	C5028	1-123-875-11	ELECT	10MF 20% 50V				
R753	1-249-414-11	CARBON	560 5% 1/4W	C5029	1-106-375-12	MYLAR	0.022MF 10% 250V				
R754	1-249-434-11	CARBON	27K 5% 1/4W	C5030	1-106-361-00	MYLAR	0.0056MF 10% 400V				
R755	1-249-405-11	CARBON	100 5% 1/4W	C5031	1-130-736-11	FILM	0.01MF 5% 100V				
R756	1-249-419-11	CARBON	1.5K 5% 1/4W	C5034	1-131-349-00	TANTALUM	2.2MF 10% 35V				
R757	1-249-405-11	CARBON	100 5% 1/4W								
R758	1-249-409-11	CARBON	220 5% 1/4W								
R760	1-249-411-11	CARBON	330 5% 1/4W								
R761	1-249-429-11	CARBON	10K 5% 1/4W	CND185*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P						
				CND186*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P						

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CND187*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			R5035	1-249-429-11	CARBON	10K 5% 1/4W
CND188*1-564-884-11	PLUG, CONNECTOR 7P			R5036	1-249-395-11	CARBON	15 5% 1/4W
				R5037	1-249-407-11	CARBON	150 5% 1/4W
				R5038	1-249-434-11	CARBON	27K 5% 1/4W
		<DIODE>		R5039	1-216-451-11	METAL OXIDE	120 5% 2W F
D5001	8-719-930-11	DIODE EQB01-11Z		R5040	1-249-435-11	CARBON	33K 5% 1/4W
D5002	8-719-911-55	DIODE U05G		R5041	1-249-414-11	CARBON	560 5% 1/4W
D5003	8-719-911-55	DIODE U05G		R5042	1-249-435-11	CARBON	33K 5% 1/4W
D5004	8-719-300-33	DIODE RU-3AM		R5043	1-249-419-11	CARBON	1.5K 5% 1/4W
D5005	8-719-300-33	DIODE RU-3AM		R5044	1-249-421-11	CARBON	2.2K 5% 1/4W
D5006	8-719-911-19	DIODE ISS119		R5045	1-249-406-11	CARBON	120 5% 1/4W
D5007	8-719-110-33	DIODE RD12ES-B3		R5046	1-249-403-11	CARBON	68 5% 1/4W
D5008	8-719-911-19	DIODE ISS119		R5047	1-216-423-11	METAL OXIDE	27 5% 1W
				R5048	1-247-753-11	CARBON	1.2K 5% 1/2W
		<COIL>		R5049	1-215-865-11	METAL OXIDE	220 5% 1W
L5001	1-459-074-00	COIL, DUST CORE 6.8MMH(HCC)		R5056	1-249-411-11	CARBON	330 5% 1/4W
L5002	1-408-245-00	INDUCTOR 22MH					
L5003	1-407-509-00	INDUCTOR 27MH					
L5004	1-407-504-00	INDUCTOR 10MH					
L5005	1-408-247-00	INDUCTOR 33MH					
		<TRANSISTOR>					
Q5001	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q5002	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q5003	8-729-195-82	TRANSISTOR 2SC2958					
Q5004	8-729-122-03	TRANSISTOR 2SA1220A-P					
*4-386-664-01	SPRING; Q5004						
Q5005	8-729-169-02	TRANSISTOR 2SC2690A					
*4-386-664-01	SPRING; Q5005						
Q5008	8-729-177-32	TRANSISTOR 2SD773					
Q5009	8-729-140-97	TRANSISTOR 2SB734-34					
Q5010	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q5011	8-729-195-82	TRANSISTOR 2SC2958					
		<RESISTOR>					
R5001	1-216-429-00	METAL OXIDE 270 5% 1W					
R5002	1-247-704-11	CARBON 220 5% 1/4W F					
R5003	1-249-399-11	CARBON 33 5% 1/4W F					
R5004	1-216-869-11	METAL OXIDE 1K 5% 1W					
R5005	1-249-395-11	CARBON 15 5% 1/4W F					
R5006	1-216-350-11	METAL OXIDE 1.2 5% 1W F					
R5007	1-216-440-00	METAL OXIDE 18K 5% 1W					
R5011	1-212-990-00	FUSIBLE 220 5% 1/2W F					
R5012	1-249-423-11	CARBON 3.3K 5% 1/4W					
R5013	1-215-445-00	METAL 10K 1% 1/6W					
R5014	1-215-433-00	METAL 3.3K 1% 1/6W					
R5015	1-249-421-11	CARBON 2.2K 5% 1/4W					
R5016	1-249-405-11	CARBON 100 5% 1/4W F					
R5017	1-216-350-11	METAL OXIDE 1.2 5% 1W F					
R5018	1-249-393-11	CARBON 10 5% 1/4W F					
R5019	1-249-439-11	CARBON 68K 5% 1/4W					
R5020	1-249-441-11	CARBON 100K 5% 1/4W					
R5021	1-249-429-11	CARBON 10K 5% 1/4W					
R5023	1-249-431-11	CARBON 15K 5% 1/4W					
R5025	1-215-868-00	METAL OXIDE 680 5% 1W					
R5027	1-249-434-11	CARBON 27K 5% 1/4W					
R5029	1-249-411-11	CARBON 330 5% 1/4W					
R5030	1-216-354-11	METAL OXIDE 2.7 5% 1W F					
R5032	1-215-908-00	METAL OXIDE 33 5% 3W F					
R5033	1-249-411-11	CARBON 330 5% 1/4W					
R5034	1-249-429-11	CARBON 10K 5% 1/4W					

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The components identified by shading and mark **▲** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
C026	1-102-125-00	CERAMIC	0.0047MF	10%	50V	C616	1-102-030-00	CERAMIC	330PF	10%	500V
C027	1-106-220-00	MYLAR	0.1MF	10%	100V	C618	1-124-637-11	ELECT	1000MF	20%	50V
C028	1-101-361-00	CERAMIC	150PF	5%	50V	C619	1-124-556-11	ELECT	2200MF	20%	16V
C029	1-102-121-00	CERAMIC	0.0022MF	10%	50V	C620	1-102-074-00	CERAMIC	0.001MF	10%	50V
C031	1-124-120-11	ELECT	220MF	20%	16V	C621	1-124-347-00	ELECT	100MF	20%	160V
C032	1-102-978-00	CERAMIC	220PF	5%	50V	C622	1-124-556-11	ELECT	2200MF	20%	16V
C251	1-124-927-11	ELECT	4.7MF	20%	50V	C623	1-124-910-11	ELECT	47MF	20%	50V
C252	1-124-927-11	ELECT	4.7MF	20%	50V	C624	1-124-122-11	ELECT	100MF	20%	50V
C253	1-124-122-11	ELECT	100MF	20%	50V	C625	1-124-360-00	ELECT	1000MF	20%	16V
C254	1-124-927-11	ELECT	4.7MF	20%	50V	C626	1-123-875-11	ELECT	10MF	20%	50V
C255	1-124-927-11	ELECT	4.7MF	20%	50V	C627	1-102-074-00	CERAMIC	0.001MF	10%	50V
C256	1-106-220-00	MYLAR	0.1MF	10%	100V	C631	1-123-875-11	ELECT	10MF	20%	50V
C257	1-101-004-00	CERAMIC	0.01MF		50V	C632	1-102-074-00	CERAMIC	0.001MF	10%	50V
C258	1-106-220-00	MYLAR	0.1MF	10%	100V	C633	1-124-927-11	ELECT	4.7MF	20%	50V
C260	1-106-220-00	MYLAR	0.1MF	10%	100V	C636	1-123-382-00	ELECT	3.3MF	20%	50V
C265	1-102-074-00	CERAMIC	0.001MF	10%	50V	C801	1-124-913-11	ELECT	470MF	20%	50V
C266	1-102-074-00	CERAMIC	0.001MF	10%	50V	C802	1-102-030-00	CERAMIC	330PF	10%	500V
C401	1-124-910-11	ELECT	47MF	20%	50V	C804	1-123-948-00	ELECT	22MF	20%	250V
C403	1-124-910-11	ELECT	47MF	20%	50V	C805	1-162-114-00	CERAMIC	0.0047MF		2KV
C501	1-124-927-11	ELECT	4.7MF	20%	50V	C806	1-106-220-00	MYLAR	0.1MF	10%	100V
C502	1-124-927-11	ELECT	4.7MF	20%	50V	C807	1-106-395-00	MYLAR	0.15MF	10%	200V
C503	1-106-371-00	MYLAR	0.015MF	10%	400V	C810	1-124-494-00	ELECT	33MF		160V
C504	1-101-361-00	CERAMIC	150PF	5%	50V	C811	1-136-113-00	FILM	2MF	5%	200V
C505	1-108-794-11	MYLAR	0.0015MF	5%	50V	C812	1-124-634-11	ELECT	1MF	20%	250V
C506	1-106-375-12	MYLAR	0.022MF	10%	250V	C813	1-102-212-00	CERAMIC	820PF	10%	500V
C507	1-130-783-00	MYLAR	0.33MF	10%	100V	C814 ▲ 1-161-731-11	CERAMIC	0.001MF	10%	2KV	
C508	1-106-375-12	MYLAR	0.022MF	10%	250V	C815	1-136-569-11	FILM	1.2MF	5%	200V
C509	1-106-220-00	MYLAR	0.1MF	10%	100V	C817	1-136-735-11	FILM	0.019MF	3%	1.4KV
C510	1-161-959-00	CERAMIC	22PF	10%	500V	C818	1-136-759-11	FILM	0.039MF	10%	630V
C511	1-108-620-11	MYLAR	0.0033MF	10%	100V	C819 ▲ 1-161-731-11	CERAMIC	0.001MF	10%	2KV	
C512	1-106-220-00	MYLAR	0.1MF	10%	100V	C820	1-106-218-00	MYLAR	0.0082MF	10%	400V
C513	1-108-614-11	MYLAR	0.001MF	10%	100V	C821 ▲ 1-162-116-51	CERAMIC	680PF	10%	2KV	
C514	1-106-228-00	MYLAR	0.22MF	10%	100V	C822	1-102-114-00	CERAMIC	470PF	10%	50V
C515	1-124-499-11	ELECT	1MF	20%	50V	C823	1-106-359-00	MYLAR	0.0047MF	10%	400V
C516	1-108-614-11	MYLAR	0.001MF	10%	100V	C824	1-102-212-00	CERAMIC	820PF	10%	500V
C517	1-124-252-00	ELECT	0.33MF	20%	50V	C825	1-106-375-12	MYLAR	0.022MF	10%	250V
C518	1-124-902-00	ELECT	0.47MF	20%	50V	C826	1-123-875-11	ELECT	10MF	20%	50V
C519	1-136-173-00	FILM	0.47MF	5%	50V						
C520	1-102-121-00	CERAMIC	0.0022MF	10%	50V						
C521	1-106-220-00	MYLAR	0.1MF	10%	100V						
C524	1-108-798-11	MYLAR	0.0033MF	5%	50V						
C525	1-102-973-00	CERAMIC	100PF	5%	50V	CF001	1-577-082-11	VIBRATOR, CERAMIC			
C526	1-102-951-00	CERAMIC	15PF	5%	50V	CF501	1-567-888-11	OSCILLATOR, CERAMIC			
C534	1-124-120-11	ELECT	220MF	20%	16V						
C537	1-124-499-11	ELECT	1MF	20%	50V						
C538	1-108-614-11	MYLAR	0.001MF	10%	100V						
C539	1-102-820-00	CERAMIC	330PF	5%	50V	CN801 *1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
C549	1-123-875-11	ELECT	10MF	20%	50V	CND01 *1-564-884-11	PLUG, CONNECTOR 7P				
C591	1-123-875-11	ELECT	10MF	20%	50V	CND02 *1-564-886-11	PLUG, CONNECTOR 9P				
C592	1-124-910-11	ELECT	47MF	20%	50V	CND11 *1-566-660-11	CONNECTOR, HINGE (PLUG) 18P				
C593	1-102-820-00	CERAMIC	330PF	5%	50V	CND12 *1-564-884-11	PLUG, CONNECTOR 7P				
C601	1-162-599-12	CERAMIC	0.0047MF		250V						
C602	1-162-599-12	CERAMIC	0.0047MF		250V	CND18 *1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)				
C603	1-162-599-12	CERAMIC	0.0047MF		250V	CND19 *1-564-881-11	PLUG, CONNECTOR 4P				
C604	1-125-318-00	ELECT(BLOCK)	220MF	20%	400V	CND21 *1-564-346-00	CONNECTOR, BOARD TO BOARD 13P				
C605	1-124-122-11	ELECT	100MF	20%	50V	CND23 *1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)				
C606	1-106-220-00	MYLAR	0.1MF	10%	100V	CND31 *1-564-346-00	CONNECTOR, BOARD TO BOARD 18P				
C607	1-130-019-00	FILM	0.0012MF	5%	50V						
C608	1-123-875-11	ELECT	10MF	20%	50V	CND41 *1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)				
C611	1-124-122-11	ELECT	100MF	20%	50V	CND45 *1-564-882-11	PLUG, CONNECTOR 5P				
C612	1-162-115-00	CERAMIC	330PF	10%	2KV	CND51 *1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)				
C613	1-136-539-11	FILM	0.0022MF	3%	2KV	CND64 *1-506-348-99	PIN, CONNECTOR 3P				
C614	1-102-030-00	CERAMIC	330PF	10%	500V	CND82 *1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
C615	1-124-557-11	ELECT	1000MF	20%	25V	CND83 *1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P				
						CND84 *1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P				
						CND86 *1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P				

D

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CND88	*1-564-884-11	PLUG, CONNECTOR 7P		IC003	8-759-603-41	IC M58655P	
CND91	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P		IC004	8-759-157-40	IC UPC574J	
CND92	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P		IC251	8-759-803-31	IC LA4280	
CND94	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)					
		<DIODE>					
D001	8-719-911-19	DIODE ISS119					
D002	8-719-911-19	DIODE ISS119					
D003	8-719-911-19	DIODE ISS119					
D004	8-719-911-19	DIODE ISS119					
D005	8-719-109-71	DIODE RD3.9ES-B1					
D007	8-719-109-89	DIODE RD5.6ES-B2					
D008	8-719-110-85	DIODE RD36ES-B4					
D009	8-719-109-89	DIODE RD5.6ES-B2					
D011	8-719-911-19	DIODE ISS119					
D012	8-719-911-19	DIODE ISS119					
D254	8-719-110-14	DIODE RD9.1ES-B3					
D255	8-719-000-12	DIODE MC931					
D256	8-719-000-12	DIODE MC931					
D501	8-719-911-19	DIODE ISS119					
D506	8-719-000-12	DIODE MC931					
D508	8-719-911-19	DIODE ISS119					
D591	8-719-911-19	DIODE ISS119					
D592	8-719-911-19	DIODE ISS119					
D593	8-719-911-19	DIODE ISS119					
D601	8-719-946-90	DIODE KBU4JL-6088					
D602	8-719-300-33	DIODE RU-3AM					
D603	8-719-911-55	DIODE U05G					
D604	8-719-911-55	DIODE U05G					
D605	8-719-911-55	DIODE U05G					
D606	8-719-300-33	DIODE RU-3AM					
D607	8-719-300-33	DIODE RU-3AM					
D608	8-719-300-33	DIODE RU-3AM					
D610	8-719-300-59	DIODE CTU-12S					
D611	8-719-900-26	DIODE ERD29-08J					
D612	8-719-300-59	DIODE CTU-12S					
D613	8-719-300-33	DIODE RU-3AM					
D614	8-719-300-33	DIODE RU-3AM					
D615	8-719-109-90	DIODE RD5.6ES-B3					
D616	8-719-109-93	DIODE TD6.2ES-B2					
D618	8-719-109-89	DIODE RD5.6ES-B2					
D620	8-719-000-12	DIODE MC931					
D622	8-719-911-19	DIODE ISS119					
D623	8-719-911-19	DIODE ISS119					
D624	8-719-911-19	DIODE ISS119					
D627	8-719-911-19	DIODE ISS119					
D630	8-719-110-39	DIODE RD15ES-B1					
D632	8-719-110-16	DIODE RD10ES-B1					
D633	8-719-911-19	DIODE ISS119					
D801	8-719-300-33	DIODE RU-3AM					
D802	8-719-300-33	DIODE RU-3AM					
D803	8-719-300-65	DIODE ES1F					
D804	8-719-911-55	DIODE U05G					
D805	8-719-911-55	DIODE U05G					
D806	8-719-945-80	DIODE ERC06-15S					
D807	8-719-945-80	DIODE ERC06-15S					
D808	8-719-900-26	DIODE ERD29-08J					
D809	8-719-901-58	DIODE RGP15J					
		<IC>					
IC001	8-759-630-06	IC M50436-614SP					
IC002	8-759-995-25	IC MB88503H-1126G					
		<IC LINK>					
PS601A	1-532-984-91	LINK, IC 2A					
PS602A	1-532-675-91	LINK, IC 1.5A					
		<TRANSISTOR>					
Q001	8-729-600-24	TRANSISTOR 2SC403SP-51					
Q002	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q003	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q004	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q252	8-729-900-36	TRANSISTOR DTC124ES					
Q501	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q503	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q505	8-729-140-96	TRANSISTOR 2SD774-34					
Q506	8-729-140-97	TRANSISTOR 2SB734-34					
Q507	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q591	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q598	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q601	8-729-921-54	TRANSISTOR 2SB1357EF					
Q602	8-729-209-02	TRANSISTOR 2SD1548-LB					
Q603	*4-368-683-01	SPRING; Q602					
Q604	8-729-921-54	TRANSISTOR 2SB1357EF					
Q605	8-729-378-91	TRANSISTOR 2SD789-3					
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF					
Q609	8-729-378-91	TRANSISTOR 2SD789-3					
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q804	8-729-304-50	TRANSISTOR 2SD1941-06					
	*4-368-683-01	SPRING; Q804					
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK					

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>							
R001	1-249-417-11	CARBON	1K 5% 1/4W	R068	1-249-421-11	CARBON	2.2K 5% 1/4W
R002	1-249-417-11	CARBON	1K 5% 1/4W	R069	1-249-423-11	CARBON	3.3K 5% 1/4W
R003	1-249-417-11	CARBON	1K 5% 1/4W	R070	1-249-417-11	CARBON	1K 5% 1/4W
R004	1-249-417-11	CARBON	1K 5% 1/4W	R071	1-249-417-11	CARBON	1K 5% 1/4W
R005	1-249-407-11	CARBON	150 5% 1/4W	R072	1-249-417-11	CARBON	1K 5% 1/4W
R006	1-249-417-11	CARBON	1K 5% 1/4W	R073	1-249-417-11	CARBON	1K 5% 1/4W
R007	1-249-405-11	CARBON	100 5% 1/4W	R074	1-249-417-11	CARBON	1K 5% 1/4W
R008	1-249-417-11	CARBON	1K 5% 1/4W	R075	1-249-417-11	CARBON	1K 5% 1/4W
R009	1-249-417-11	CARBON	1K 5% 1/4W	R077	1-249-413-11	CARBON	470 5% 1/4W
R010	1-249-413-11	CARBON	470 5% 1/4W	R078	1-249-423-11	CARBON	3.3K 5% 1/4W
R011	1-249-417-11	CARBON	1K 5% 1/4W	R079	1-249-435-11	CARBON	33K 5% 1/4W
R012	1-249-417-11	CARBON	1K 5% 1/4W	R080	1-249-429-11	CARBON	10K 5% 1/4W
R013	1-249-417-11	CARBON	1K 5% 1/4W	R081	1-249-441-11	CARBON	100K 5% 1/4W
R014	1-249-417-11	CARBON	1K 5% 1/4W	R082	1-249-409-11	CARBON	220 5% 1/4W
R016	1-249-429-11	CARBON	10K 5% 1/4W	R083	1-249-429-11	CARBON	10K 5% 1/4W
R017	1-249-417-11	CARBON	1K 5% 1/4W	R084	1-249-413-11	CARBON	470 5% 1/4W
R018	1-249-417-11	CARBON	1K 5% 1/4W	R085	1-249-429-11	CARBON	10K 5% 1/4W
R019	1-249-433-11	CARBON	22K 5% 1/4W	R086	1-249-417-11	CARBON	1K 5% 1/4W
R020	1-249-433-11	CARBON	22K 5% 1/4W	R087	1-249-417-11	CARBON	1K 5% 1/4W
R021	1-249-433-11	CARBON	22K 5% 1/4W	R088	1-249-425-11	CARBON	4.7K 5% 1/4W
R022	1-249-433-11	CARBON	22K 5% 1/4W	R090	1-249-413-11	CARBON	470 5% 1/4W
R023	1-249-429-11	CARBON	10K 5% 1/4W	R091	1-249-409-11	CARBON	220 5% 1/4W
R024	1-249-429-11	CARBON	10K 5% 1/4W	R093	1-249-429-11	CARBON	10K 5% 1/4W
R025	1-249-417-11	CARBON	1K 5% 1/4W	R094	1-249-429-11	CARBON	10K 5% 1/4W
R026	1-249-417-11	CARBON	1K 5% 1/4W	R095	1-249-409-11	CARBON	220 5% 1/4W
R027	1-249-417-11	CARBON	1K 5% 1/4W	R096	1-249-409-11	CARBON	220 5% 1/4W
R028	1-249-417-11	CARBON	1K 5% 1/4W	R097	1-249-429-11	CARBON	10K 5% 1/4W
R029	1-249-417-11	CARBON	1K 5% 1/4W	R098	1-249-429-11	CARBON	10K 5% 1/4W
R030	1-249-425-11	CARBON	1.7K 5% 1/4W	R099	1-215-900-11	METAL OXIDE	22K 5% 2W F
R031	1-249-429-11	CARBON	10K 5% 1/4W	R251	1-249-417-11	CARBON	1K 5% 1/4W
R032	1-249-417-11	CARBON	1K 5% 1/4W	R252	1-249-413-11	CARBON	470 5% 1/4W
R033	1-249-413-11	CARBON	470 5% 1/4W	R253	1-249-413-11	CARBON	470 5% 1/4W
R034	1-249-413-11	CARBON	470 5% 1/4W	R255	1-249-385-11	CARBON	2.2 5% 1/4W F
R035	1-249-431-11	CARBON	15K 5% 1/4W	R256	1-249-385-11	CARBON	2.2 5% 1/4W F
R036	1-249-421-11	CARBON	2.2K 5% 1/4W	R260	1-249-393-11	CARBON	10 5% 1/4W
R037	1-249-417-11	CARBON	1K 5% 1/4W	R261	1-249-429-11	CARBON	10K 5% 1/4W
R038	1-249-417-11	CARBON	1K 5% 1/4W	R262	1-249-413-11	CARBON	470 5% 1/4W
R039	1-249-417-11	CARBON	1K 5% 1/4W	R263	1-249-421-11	CARBON	2.2K 5% 1/4W
R040	1-249-417-11	CARBON	1K 5% 1/4W	R264	1-249-421-11	CARBON	2.2K 5% 1/4W
R041	1-249-417-11	CARBON	1K 5% 1/4W	R265	1-249-425-11	CARBON	4.7K 5% 1/4W
R042	1-249-417-11	CARBON	1K 5% 1/4W	R266	1-249-425-11	CARBON	4.7K 5% 1/4W
R043	1-249-417-11	CARBON	1K 5% 1/4W	R401	1-249-434-11	CARBON	27K 5% 1/4W
R044	1-249-429-11	CARBON	10K 5% 1/4W	R402	1-249-435-11	CARBON	33K 5% 1/4W
R045	1-249-417-11	CARBON	1K 5% 1/4W	R410	1-249-413-11	CARBON	470 5% 1/4W
R046	1-249-429-11	CARBON	10K 5% 1/4W	R411	1-249-413-11	CARBON	470 5% 1/4W
R047	1-249-409-11	CARBON	220 5% 1/4W	R412	1-249-413-11	CARBON	470 5% 1/4W
R048	1-249-417-11	CARBON	1K 5% 1/4W	R500	1-247-897-11	CARBON	560K 5% 1/4W
R049	1-249-417-11	CARBON	1K 5% 1/4W	R501	1-249-413-11	CARBON	470 5% 1/4W
R050	1-249-433-11	CARBON	22K 5% 1/4W	R502	1-249-409-11	CARBON	220 5% 1/4W
R051	1-249-429-11	CARBON	10K 5% 1/4W	R503	1-249-410-11	CARBON	270 5% 1/4W
R052	1-249-439-11	CARBON	68K 5% 1/4W	R504	1-215-427-00	METAL	1.8K 1% 1/6W
R053	1-249-437-11	CARBON	47K 5% 1/4W	R505	1-249-431-11	CARBON	15K 5% 1/4W
R054	1-249-417-11	CARBON	1K 5% 1/4W	R506	1-249-428-11	CARBON	8.2K 5% 1/4W
R056	1-249-440-11	CARBON	82K 5% 1/4W	R507	1-247-891-00	CARBON	330K 5% 1/4W
R057	1-249-409-11	CARBON	220 5% 1/4W	R509	1-249-424-11	CARBON	3.9K 5% 1/4W
R058	1-249-409-11	CARBON	220 5% 1/4W	R510	1-249-426-11	CARBON	5.6K 5% 1/4W
R059	1-249-437-11	CARBON	47K 5% 1/4W	R511	1-249-429-11	CARBON	10K 5% 1/4W
R060	1-249-437-11	CARBON	47K 5% 1/4W	R512	1-247-891-00	CARBON	330K 5% 1/4W
R061	1-249-417-11	CARBON	1K 5% 1/4W	R513	1-249-429-11	CARBON	10K 5% 1/4W
R062	1-249-411-11	CARBON	330 5% 1/4W	R514	1-249-409-11	CARBON	220 5% 1/4W
R063	1-249-431-11	CARBON	15K 5% 1/4W	R515	1-249-423-11	CARBON	3.3K 5% 1/4W
R064	1-249-429-11	CARBON	10K 5% 1/4W	R516	1-249-408-11	CARBON	180 5% 1/4W
R067	1-249-413-11	CARBON	470 5% 1/4W	R517	1-249-429-11	CARBON	10K 5% 1/4W

D

The components identified by shading and mark are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R518	1-249-437-11	CARBON	47K 5% 1/4W	R628	1-249-393-11	CARBON	10 5% 1/4W
R519	1-249-433-11	CARBON	22K 5% 1/4W	R629	1-249-411-11	CARBON	330 5% 1/4W
R520	1-249-411-11	CARBON	330 5% 1/4W	R630	1-249-437-11	CARBON	47K 5% 1/4W
R521	1-249-405-11	CARBON	100 5% 1/4W	R633	1-249-405-11	CARBON	100 5% 1/4W
R522	1-215-469-00	METAL OXIDE	100K 1% 1/6W	R634	1-216-430-11	METAL OXIDE	390 5% 1W
R523	1-249-417-11	CARBON	1K 5% 1/4W	R635	1-249-429-11	CARBON	10K 5% 1/4W
R524	1-249-421-11	CARBON	2.2K 5% 1/4W	R636	1-249-429-11	CARBON	10K 5% 1/4W
R525	1-249-417-11	CARBON	1K 5% 1/4W	R642	1-216-343-00	METAL OXIDE	0.33 5% 1W F
R528	1-249-408-11	CARBON	180 5% 1/4W	R643	1-217-192-21	WIREWOUND	0.22 10% 2W F
R529	1-249-427-11	CARBON	6.8K 5% 1/4W	R647	1-216-485-11	METAL OXIDE	5.6K 5% 3W F
R530	1-247-695-11	CARBON	39 5% 1/4W F	R648	1-216-485-11	METAL OXIDE	5.6K 5% 3W F
R534	1-247-901-11	CARBON	820K 5% 1/4W	R649	1-249-385-11	CARBON	2.2 5% 1/4W
R536	1-249-749-00	CARBON	2.2M 5% 1/4W	R650	1-249-417-11	CARBON	1K 5% 1/4W
R538	1-247-883-00	CARBON	150K 5% 1/4W	R651	1-249-405-11	CARBON	100 5% 1/4W
R539	1-247-883-00	CARBON	150K 5% 1/4W	R652	1-247-903-00	CARBON	1M 5% 1/4W
R540	1-249-399-11	CARBON	33 5% 1/4W	R653	1-205-758-11	WIREWOUND	100 10% 10W F
R541	1-249-438-11	CARBON	56K 5% 1/4W	R802	1-249-443-11	CARBON	0.47 5% 1/4W F
R542	1-249-425-11	CARBON	4.7K 5% 1/4W	R805	1-249-448-11	CARBON	1.2 5% 1/4W F
R546	1-249-434-11	CARBON	27K 5% 1/4W	R806	1-249-439-11	CARBON	68K 5% 1/4W
R549	1-215-890-11	METAL OXIDE	470 5% 2W F	R807	1-216-869-11	METAL OXIDE	1K 5% 1W
R550	1-249-440-11	CARBON	82K 5% 1/4W	R809	1-202-821-11	SOLID	1.8K 10% 1/2W
R551	1-249-749-00	CARBON	2.2M 5% 1/4W	R810	1-202-818-00	SOLID	1K 10% 1/2W
R552	1-216-433-00	METAL OXIDE	1.2K 5% 1W	R811	1-215-882-00	METAL OXIDE	22 5% 2W F
R553	1-216-869-11	METAL OXIDE	1K 5% 1W	R812	1-249-494-11	CARBON	68K 5% 1/2W F
R554	1-249-411-11	CARBON	330 5% 1/4W	R815	1-215-884-11	METAL OXIDE	47 5% 2W F
R555	1-249-749-00	CARBON	2.2M 5% 1/4W	R816	1-215-868-00	METAL OXIDE	680 5% 1W
R556	1-249-405-11	CARBON	100 5% 1/4W	R817	1-249-417-11	CARBON	1K 5% 1/4W
R557	1-249-425-11	CARBON	4.7K 5% 1/4W	R820	1-249-403-11	CARBON	68 5% 1/4W
R558	1-247-895-00	CARBON	470K 5% 1/4W	R821	1-247-725-11	CARBON	10K 5% 1/4W F
R559	1-249-427-11	CARBON	6.8K 5% 1/4W	R822	1-217-778-11	FUSIBLE	1K 5% 1W F
R560	1-249-411-11	CARBON	330 5% 1/4W	R825	1-216-342-11	METAL OXIDE	0.27 5% 1W F
R591	1-249-427-11	CARBON	6.8K 5% 1/4W	R826	1-249-441-11	CARBON	100K 5% 1/4W
R592	1-249-429-11	CARBON	10K 5% 1/4W	R827	1-249-429-11	CARBON	10K 5% 1/4W
R593	1-249-429-11	CARBON	10K 5% 1/4W	R828	1-249-423-11	CARBON	3.3K 5% 1/4W
R594	1-249-424-11	CARBON	3.9K 5% 1/4W	R829	1-249-415-11	CARBON	680 5% 1/4W
R595	1-249-417-11	CARBON	1K 5% 1/4W	R830	1-249-429-11	CARBON	10K 5% 1/4W
R596	1-249-425-11	CARBON	4.7K 5% 1/4W	R831	1-249-451-11	CARBON	2.2 5% 1/4W
R597	1-249-425-11	CARBON	4.7K 5% 1/4W	R1001	1-249-421-11	CARBON	2.2K 5% 1/4W
R598	1-249-405-11	CARBON	100 5% 1/4W	R1005	1-249-408-11	CARBON	180 5% 1/4W
R599	1-249-405-11	CARBON	100 5% 1/4W	R1006	1-249-408-11	CARBON	180 5% 1/4W
R602	1-216-465-11	METAL OXIDE	27K 5% 2W F	R1007	1-249-408-11	CARBON	180 5% 1/4W
R603	1-216-359-00	METAL OXIDE	6.8 5% 1W F	R1008	1-249-409-11	CARBON	220 5% 1/4W
R604	1-249-414-11	CARBON	560 5% 1/4W	R1009	1-249-417-11	CARBON	1K 5% 1/4W
R605	1-215-469-00	METAL	100K 1% 1/6W	R1011	1-249-413-11	CARBON	470 5% 1/4W
R606	1-247-850-11	CARBON	6.2K 5% 1/4W	R1012	1-249-405-11	CARBON	100 5% 1/4W
R607	1-249-434-11	CARBON	27K 5% 1/4W	R5501	1-249-429-11	CARBON	10K 5% 1/4W
R608	1-216-490-11	METAL OXIDE	39K 5% 3W F	R5502	1-249-417-11	CARBON	1K 5% 1/4W
R609	1-249-401-11	CARBON	47 5% 1/4W	R5503	1-249-389-11	CARBON	4.7 5% 1/4W
R610	1-249-385-11	CARBON	2.2 5% 1/4W F	R5504	1-247-903-00	CARBON	1M 5% 1/4W
R611	1-249-385-11	CARBON	2.2 5% 1/4W F	<VARIABLE RESISTOR>			
R612	1-207-905-00	WIREWOUND	0.27 10% 2W F	RV501	1-238-013-11	RES, ADJ, CARBON	2.2K
R613	1-249-401-11	CARBON	47 5% 1/4W	RV502	1-238-016-11	RES, ADJ, CARBON	10K
R614	1-205-758-11	WIREWOUND	100 10% 10W F	RV601	1-238-013-11	RES, ADJ, CARBON	2.2K
R616	1-249-417-11	CARBON	1K 5% 1/4W	<SPARK GAP>			
R617	1-249-411-11	CARBON	330 5% 1/4W	SG801	1-519-422-11	GAP, SPARK	
R618	1-216-431-11	METAL OXIDE	560 5% 1W	<TRANSFORMER>			
R619	1-249-429-11	CARBON	10K 5% 1/4W	T601A 1-448-961-21 S.R.T			
R620	1-249-433-11	CARBON	22K 5% 1/4W				
R621	1-249-431-11	CARBON	15K 5% 1/4W				
R622	1-249-429-11	CARBON	10K 5% 1/4W				
R623	1-249-377-11	CARBON	0.47 5% 1/4W F				
R624	1-249-411-11	CARBON	330 5% 1/4W				
R625	1-215-865-11	METAL OXIDE	220 5% 1W				
R626	1-249-411-11	CARBON	330 5% 1/4W				

The components identified by shading and mark are critical for safety.
Replace only with part number specified.

D

V

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
T602	1-424-011-21	TRANSFORMER, PULSE		D08	8-719-106-17	DIODE RD6.8M-B2					
T801	1-437-090-00	HDT		D09	8-719-400-18	DIODE MA152WK					
T802	1-439-418-21	TRANSFORMER ASSY, FLYBACK (UX-1610)		D10	8-719-400-18	DIODE MA152WK					
*****				D11	8-719-914-44	DIODE DAP202K					
*****				D12	8-719-914-44	DIODE DAP202K					
*A-1347-030-A V BOARD, COMPLETE				<IC>							
*4-380-698-01	CASE (MAIN), SHIELD, A1			IC1	8-759-986-92	IC SMAB8461P-W177					
*4-380-699-01	CASE (UPPER LID), SHIELD, A1			IC2	8-759-972-96	IC SAA5231-V6					
*4-382-701-01	CASE (BOTTOM LID), SHIELD, A2			IC3	8-759-988-99	IC SAA5243P-E-M2					
<CAPACITOR>				IC4	8-759-230-68	IC TMM2063P-70					
C01	1-126-101-11	ELECT	100MF	20%	16V	<COIL>					
C02	1-124-120-11	ELECT	220MF	20%	16V	L01	1-408-411-00	INDUCTOR	15UH		
C03	1-124-119-00	ELECT	330MF	20%	16V	L02	1-408-407-00	INDUCTOR	6.8UH		
C04	1-124-477-11	ELECT	47MF	20%	16V	L03	1-408-407-00	INDUCTOR	6.8UH		
C05	1-126-101-11	ELECT	100MF	20%	16V	L04	1-408-407-00	INDUCTOR	6.8UH		
C06	1-124-120-11	ELECT	220MF	20%	16V	L05	1-408-407-00	INDUCTOR	6.8UH		
C07	1-124-499-11	ELECT	1MF	20%	50V	L06	1-408-407-00	INDUCTOR	6.8UH		
C08	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	<TRANSISTOR>					
C09	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	Q01	8-729-920-92	TRANSISTOR	2SD2096-EF		
C10	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	Q02	8-729-807-50	TRANSISTOR	2SD1623R		
C11	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	Q03	8-729-900-53	TRANSISTOR	DTC114EK		
C12	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	Q04	8-729-271-22	TRANSISTOR	2SC2712G		
C13	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	Q05	8-729-807-50	TRANSISTOR	2SD1623R		
C14	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	Q06	8-729-271-22	TRANSISTOR	2SC2712G		
C15	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	Q07	8-729-900-98	TRANSISTOR	DTC143TK		
C16	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V	Q09	8-729-807-87	TRANSISTOR	2SB1295-UL6		
C17	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	Q10	8-729-807-87	TRANSISTOR	2SB1295-UL6		
C18	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	Q11	8-729-807-87	TRANSISTOR	2SB1295-UL6		
C19	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	<RESISTOR>					
C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	JW1	1-216-295-00	METAL GLAZE	0	5%	1/1W
C21	1-163-833-00	CERAMIC CHIP	0.068MF		25V	JW2	1-216-295-00	METAL GLAZE	0	5%	1/1W
C24	1-126-101-11	ELECT	100MF	20%	16V	JW3	1-216-295-00	METAL GLAZE	0	5%	1/1W
C25	1-124-477-11	ELECT	47MF	20%	16V	JW4	1-216-295-00	METAL GLAZE	0	5%	1/1W
C27	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	JW5	1-216-295-00	METAL GLAZE	0	5%	1/1W
C28	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	JW6	1-216-295-00	METAL GLAZE	0	5%	1/1W
C29	1-124-927-11	ELECT	4.7MF	20%	50V	JW7	1-216-295-00	METAL GLAZE	0	5%	1/1W
C51	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW8	1-216-295-00	METAL GLAZE	0	5%	1/1W
C52	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW9	1-216-295-00	METAL GLAZE	0	5%	1/1W
C53	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW10	1-216-295-00	METAL GLAZE	0	5%	1/1W
C54	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW11	1-216-295-00	METAL GLAZE	0	5%	1/1W
C55	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW12	1-216-295-00	METAL GLAZE	0	5%	1/1W
C56	1-163-038-00	CERAMIC CHIP	0.1MF		25V	JW13	1-216-295-00	METAL GLAZE	0	5%	1/1W
C57	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	JW14	1-216-295-00	METAL GLAZE	0	5%	1/1W
C58	1-163-141-00	CERAMIC CHIP	0.0001MF	5%	50V	JW15	1-216-295-00	METAL GLAZE	0	5%	1/1W
C59	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	JW16	1-216-295-00	METAL GLAZE	0	5%	1/1W
<CONNECTOR>				JW17	1-216-295-00	METAL GLAZE	0	5%	1/1W		
CNV03 *1-508-784-00 PIN, CONNECTOR (5MM PITCH) 1P				JW18	1-216-295-00	METAL GLAZE	0	5%	1/1W		
<TRIMMER>				JW19	1-216-295-00	METAL GLAZE	0	5%	1/1W		
CT01	1-141-392-11	CAP. VAR. TRIMMER (1 GANG)		JW20	1-216-295-00	METAL GLAZE	0	5%	1/1W		
<DIODE>				JW21	1-216-295-00	METAL GLAZE	0	5%	1/1W		
D01	8-719-105-91	DIODE RD5.6M-B2		JW22	1-216-295-00	METAL GLAZE	0	5%	1/1W		
D02	8-719-106-79	DIODE RD13M-B1		JW23	1-216-295-00	METAL GLAZE	0	5%	1/1W		
D03	8-719-400-18	DIODE MA152WK		JW25	1-216-295-00	METAL GLAZE	0	5%	1/1W		
D04	8-719-105-52	DIODE RD3.6M-B2		R01	1-218-326-11	METAL GLAZE	470	5%	1/2V		
D07	8-719-106-17	DIODE RD6.8M-B2		R02	1-216-065-00	METAL GLAZE	4.7K	5%	1/1W		
				R04	1-218-326-11	METAL GLAZE	470	5%	1/2V		

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J2

H8

H7

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R05	1-216-025-00	METAL GLAZE	100 5% 1/10W	X02	1-567-495-21	OSCILLATOR, CRYSTAL	
R06	1-216-049-00	METAL GLAZE	1K 5% 1/10W	X03	1-577-082-11	VIBRATOR, CERAMIC	
R07	1-216-025-00	METAL GLAZE	100 5% 1/10W				*****
R08	1-216-037-00	METAL GLAZE	330 5% 1/10W				*****
R09	1-216-091-00	METAL GLAZE	56K 5% 1/10W				*****
R13	1-216-025-00	METAL GLAZE	100 5% 1/10W				*****
R14	1-216-025-00	METAL GLAZE	100 5% 1/10W				*****
R15	1-216-121-00	METAL GLAZE	1M 5% 1/10W				*****
R16	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W				*****
R17	1-216-049-00	METAL GLAZE	1K 5% 1/10W				*****
R18	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C1401	1-126-105-11	ELECT	1000MF 20% 35V
R19	1-216-037-00	METAL GLAZE	330 5% 1/10W	C1402	1-126-105-11	ELECT	1000MF 20% 35V
R20	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W				*****
R27	1-216-013-00	METAL GLAZE	33 5% 1/10W				*****
R28	1-216-013-00	METAL GLAZE	33 5% 1/10W	CNJ23 *1-564-893-11	PLUG, CONNECTOR 4P		
R29	1-216-013-00	METAL GLAZE	33 5% 1/10W	CNJ242*1-564-893-11	PLUG, CONNECTOR 4P		
R30	1-218-325-11	METAL GLAZE	120 5% 1/4W				*****
R31	1-218-325-11	METAL GLAZE	120 5% 1/4W				*****
R32	1-218-325-11	METAL GLAZE	120 5% 1/4W				*****
R33	1-216-023-00	METAL GLAZE	82 5% 1/10W				*****
R34	1-216-049-00	METAL GLAZE	1K 5% 1/10W				*****
R37	1-216-025-00	METAL GLAZE	100 5% 1/10W				*****
R38	1-216-047-00	METAL GLAZE	820 5% 1/10W				*****
R40	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R41	1-216-041-00	METAL GLAZE	470 5% 1/10W				*****
R43	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R44	1-216-041-00	METAL GLAZE	470 5% 1/10W				*****
R45	1-216-049-00	METAL GLAZE	1K 5% 1/10W				*****
R46	1-216-311-00	METAL GLAZE	6.8 5% 1/10W				*****
R51	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R52	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	*1-629-788-22	H8 BOARD		
R53	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R54	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R55	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				*****
R56	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R57	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				*****
R58	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				*****
R59	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W				*****
R60	1-216-076-00	METAL GLAZE	13K 5% 1/10W				*****
R61	1-216-083-00	METAL GLAZE	27K 5% 1/10W				*****
R62	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	D1401	8-719-311-89	DIODE SEL1222R-C	
R63	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	D1402	8-719-311-89	DIODE SEL1222R-C	
R64	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	D1403	8-719-311-89	DIODE SEL1222R-C	
R65	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	D1403	*4-387-801-01	HOLDER, LED; D1403	
R66	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	D1404	8-719-311-89	DIODE SEL1222R-C	
R67	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	D1404	*4-387-801-01	HOLDER, LED; D1404	
R68	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				*****
R69	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				*****
<VARIABLE RESISTOR>							
RV01	1-238-012-11	RES, ADJ, CARBON 1K		IC1401	8-741-138-70	IC BX-1387	
<CONNECTOR>							
V1	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P		R1498	1-249-415-11	CARBON	680 5% 1/4I
V2	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P					*****
V3	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P					*****
V4	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)					*****
V5	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)					*****
<CRYSTAL>							
X01	1-567-162-21	OSCILLATOR, CRYSTAL					*****
<CONNECTOR>							
CNH702*1-564-898-11	PLUG, CONNECTOR 9P			CNH703*1-564-892-41	PLUG, CONNECTOR 3P		

H7

J1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<DIODE>											
D1405	8-719-812-41 4-359-103-00	DIODE TLR124 HOLDER, LED; D1405		D1407	8-719-106-53	DIODE RD10M-B2					
<SWITCH>											
S1401	1-571-085-21	SWITCH, TACTILE		D1409	8-719-106-44	DIODE RD9.1M-B2					
S1402	1-571-085-21	SWITCH, TACTILE		D1410	8-719-106-44	DIODE RD9.1M-B2					
S1403	1-571-085-21	SWITCH, TACTILE		D1419	8-719-106-23	DIODE RD7.5M-B2					
S1404	1-571-085-21	SWITCH, TACTILE		D1501	8-719-400-18	DIODE MA152WK					
S1405	1-571-085-21	SWITCH, TACTILE		D1502	8-719-400-18	DIODE MA152WK					
S1406	1-571-085-21	SWITCH, TACTILE		D1504	8-719-400-18	DIODE MA152WK					
S1407	1-571-085-21	SWITCH, TACTILE		D1505	8-719-800-76	DIODE 1SS226					
S1408	1-571-085-21	SWITCH, TACTILE		D1506	8-719-118-15	DIODE RD36M-B					
S1409	1-571-085-21	SWITCH, TACTILE		D1507	8-719-400-18	DIODE MA152WK					
S1410	1-571-085-21	SWITCH, TACTILE		D1509	8-719-400-18	DIODE MA152WK					
S1411	1-571-085-21	SWITCH, TACTILE		D1551	8-719-107-43	DIODE RD24M-B2					
S1412	1-571-085-21	SWITCH, TACTILE		D1552	8-719-300-33	DIODE RU-3AM					
S1414	1-571-085-21	SWITCH, TACTILE		<IC>							

*A-1371-577-A J1 BOARD, COMPLETE											

<CAPACITOR>											
C1407	1-124-477-11	ELECT	47MF	20%	16V						
C1415	1-124-902-00	ELECT	0.47MF	20%	50V						
C1416	1-124-902-00	ELECT	0.47MF	20%	50V						
C1418	1-163-003-11	CERAMIC CHIP	330PF	10%	50V						
C1419	1-163-003-11	CERAMIC CHIP	330PF	10%	50V						
C1423	1-106-375-12	MYLAR	0.022MF	10%	250V						
C1424	1-106-375-12	MYLAR	0.022MF	10%	250V						
C1427	1-136-017-00	CERAMIC CHIP	0.0047MF		50V						
C1428	1-136-017-00	CERAMIC CHIP	0.0047MF		50V						
C1431	1-124-902-00	ELECT	0.47MF	20%	50V						
C1432	1-124-902-00	ELECT	0.47MF	20%	50V						
C1433	1-126-101-11	ELECT	100MF	20%	16V						
C1501	1-123-875-11	ELECT	10MF	20%	50V						
C1502	1-123-875-11	ELECT	10MF	20%	50V						
C1503	1-108-614-11	MYLAR	0.001MF	10%	100V						
C1504	1-124-910-11	ELECT	47MF	20%	50V						
C1505	1-106-383-00	MYLAR	0.047MF	10%	100V						
C1507	1-108-620-11	MYLAR	0.0033MF	10%	100V						
C1508	1-124-499-11	ELECT	1MF	20%	50V						
C1509	1-124-499-11	ELECT	1MF	20%	50V						
C1511	1-123-875-11	ELECT	10MF	20%	50V						
C1512	1-106-363-00	MYLAR	0.0068MF	10%	400V						
C1513	1-163-105-00	CERAMIC CHIP	33PF	5%	50V						
C1514	1-106-353-00	MYLAR	0.027MF	10%	250V						
C1515	1-102-117-00	CERAMIC	820PF	10%	50V						
C1551	1-163-117-00	CERAMIC CHIP	100PF	5%	50V						
C1552	1-124-122-11	ELECT	100MF	20%	50V						
<CONNECTOR>											
CN1401	1-537-088-11	TERMINAL BOARD, INPUT/OUTPUT									
CNJ41	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P									
CNJ43	*1-564-893-11	PLUG, CONNECTOR 4P									
CNJ51	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P									
CNJ40	1-561-534-41	SOCKET 21P									
<DIODE>											
D1407	8-719-106-53	DIODE RD10M-B2									
D1409	8-719-106-44	DIODE RD9.1M-B2									
D1410	8-719-106-44	DIODE RD9.1M-B2									
D1419	8-719-106-23	DIODE RD7.5M-B2									
D1501	8-719-400-18	DIODE MA152WK									
D1502	8-719-400-18	DIODE MA152WK									
D1504	8-719-400-18	DIODE MA152WK									
D1505	8-719-800-76	DIODE 1SS226									
D1506	8-719-118-15	DIODE RD36M-B									
D1507	8-719-400-18	DIODE MA152WK									
D1509	8-719-400-18	DIODE MA152WK									
D1551	8-719-107-43	DIODE RD24M-B2									
D1552	8-719-300-33	DIODE RU-3AM									
<IC>											
IC1402	8-759-946-32	IC TEA2014A									
IC1501	8-759-942-16	IC TEA2031A									
<COIL>											
L1401	1-412-240-11	INDUCTOR, WIDE BAND									
L1402	1-412-240-11	INDUCTOR, WIDE BAND									
<TRANSISTOR>											
Q1551	8-729-271-22	TRANSISTOR 2SC2712G									
Q1552	8-729-140-96	TRANSISTOR 2SD774-34									
<RESISTOR>											
JW1401	1-216-295-00	METAL GLAZE 0	5%	1/10W							
JW1404	1-216-295-00	METAL GLAZE 0	5%	1/10W							
JW1452	1-216-296-00	METAL GLAZE 0	5%	1/8W							
JW1453	1-216-296-00	METAL GLAZE 0	5%	1/8W							
JW1456	1-216-295-00	METAL GLAZE 0	5%	1/10W							
JW1457	1-216-296-00	METAL GLAZE 0	5%	1/8W							
JW1458	1-216-295-00	METAL GLAZE 0	5%	1/10W							
JW1459	1-216-296-00	METAL GLAZE 0	5%	1/8W							
JW1461	1-216-296-00	METAL GLAZE 0	5%	1/8W							
JW1463	1-216-295-00	METAL GLAZE 0	5%	1/10W							
R1417	1-216-023-00	METAL GLAZE 82	5%	1/10W							
R1423	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W							
R1424	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W							
R1428	1-216-113-00	METAL GLAZE 470K	5%	1/10W							
R1429	1-216-113-00	METAL GLAZE 470K	5%	1/10W							
R1430	1-216-172-00	METAL GLAZE 82	5%	1/8W							
R1433	1-216-033-00	METAL GLAZE 220	5%	1/10W							
R1434	1-249-393-11	CARBON 10	5%	1/4W F							
R1437	1-216-222-00	METAL GLAZE 10K	5%	1/8W							
R1440	1-216-045-00	METAL GLAZE 680	5%	1/10W							
R1441	1-216-045-00	METAL GLAZE 680	5%	1/10W							
R1442	1-216-089-00	METAL GLAZE 47K	5%	1/10W							
R1443	1-216-089-00	METAL GLAZE 47K	5%	1/10W							
R1454	1-216-180-00	METAL GLAZE 180	5%	1/8W							
R1455	1-216-180-00	METAL GLAZE 180	5%	1/8W							
R1501	1-216-230-00	METAL GLAZE 22K	5%	1/8W							
R1502	1-216-232-00	METAL GLAZE 27K	5%	1/8W							
R1503	1-216-262-00	METAL GLAZE 470K	5%	1/8W							
R1504	1-216-234-00	METAL GLAZE 33K	5%	1/8W							

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

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ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
A-1470-886-A	COMMANDER ASSY (RM-670) (FOR PORTUGUESE)	
A-1470-876-A	COMMANDER ASSY (RM-673) (EXCEPT PORTUGUESE)	
3-750-523-11	MANUAL, INSTRUCTION	
*4-384-027-01	BAG, PROTECTION	
*4-389-129-01	CUSHION (UPPER) (ASSY)	
*4-389-130-01	INDIVIDUAL CARTON	
*4-389-131-01	CUSHION (LOWER)	
*4-389-134-01	CUSHION (FRONT)	
*4-389-164-01	SPACER	